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"THE LICENSING OF GRAIN ELEVATORS" IN THIS ISSUE

THE AMERICAN ELEVATOR AND GRAIN TRADE

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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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No. 5 } One Dollar Per Annum
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ASSURED
SHIPPERS**

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Chicago Board of Trade

WE WILL FILL THE BILL

**SIMONS, DAY
& CO.**
GRAIN, PROVISIONS, STOCKS, BONDS.
We solicit consignments and offers of cash grain, also future delivery orders on all exchanges.
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Direct Private Wires to New York and Illinois and Iowa Points

Established 1877
LANGENBERG BROS. GRAIN CO.
GRAIN and HAY
We Solicit Your Consignments
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**We Solicit Your
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Harris, Winthrop & Co.
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Many good shippers have availed themselves of our service continuously for more than twenty-five years.

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(The World's Greatest Hay Market)

If you have Hay we want it—if you want Hay we have it. We have unequalled facilities, the largest established trade and outlet. Liberal advances on consignment. Kansas City handling charges the lowest, service the best. Write Us Your Needs in Alfalfa Meal

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Members New York Stock Exchange
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Established 30 years

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SAVE 50%

of the cost of unloading grain, seeds, coal and any bulk freight by using the

CLIMAX SCOOP-TRUCK

A thousand men will certify that.

Price \$13.00

F. O. B. Factory

Capacity 2½ Bushels Grain
200 Pounds Coal

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SCOOP-TRUCK COMPANY**

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**Economy and Satisfaction
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Dixon's SILICA GRAPHITE Paint

is used by the leading grain elevator concerns, because it LASTS LONGER and costs less per year of service.

Write us for particulars, addressing
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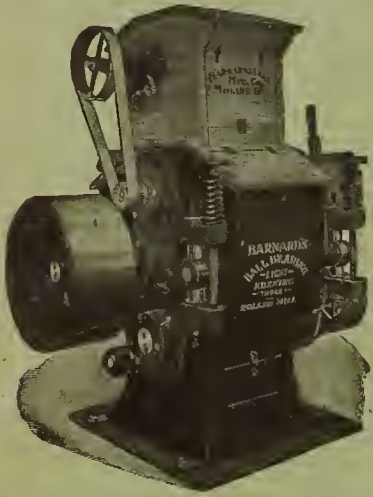
Made in JERSEY CITY, N. J., by the

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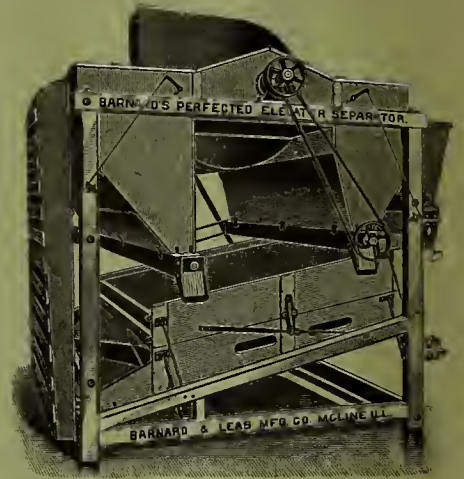
ESTABLISHED 1827

Everything for Handling Grain

No need to look farther

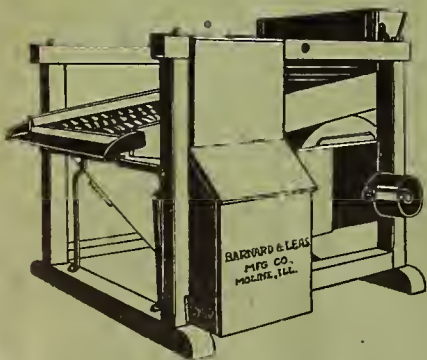


Feed Grinders
Grain Cleaners
Oat Clippers
Oat Separators
Corn Shellers

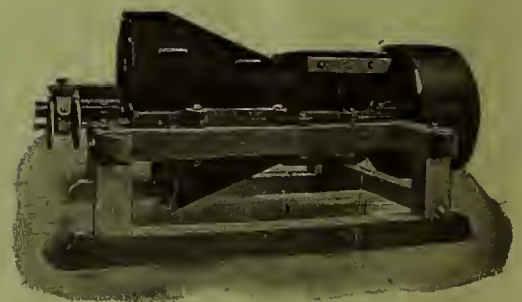


Corn Cleaners
Feed Screens
Corn Rolls
Dust Collectors
Turn Heads
Wagon Dumps
Automatic Scales
Wire Cloth
Perforated Metal
Rope Drives
Friction Clutches
Grain Shovels

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*Write today for
circulars concerning any
machines which
interest you*



BARNARD & LEAS MFG. CO.
MILL BUILDERS AND
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ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.

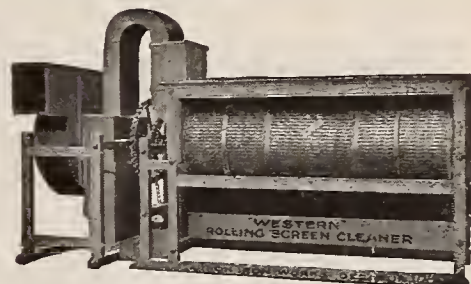
The WESTERN Line ELEVATOR EQUIPMENT IS

ALL AMERICAN



"Western" Pitless Warehouse Sheller

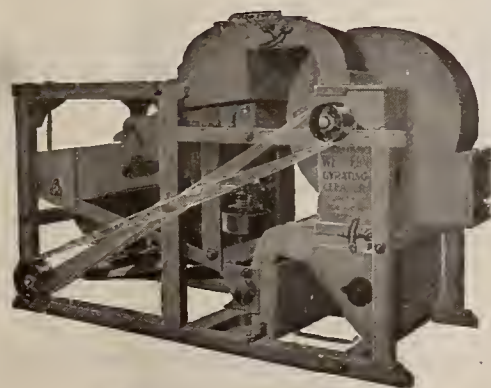
THE determination of the American to overcome difficulties makes him, of all other nationalities, the most successful wherever he goes.



"Western" Rolling Corn Screen Cleaner

WESTERN Machines are American, and by this virtue they possess the same adaptability as the American citizen. They have exceptional strength and will stand up surprisingly well under any strain. They have always made good because they are basically correct in design and are manufactured from carefully selected materials.

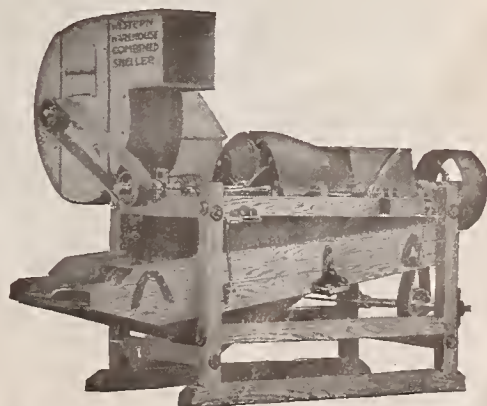
SEND for one of our illustrated catalogues before you build your new elevator or start remodeling your old one. Compare our complete line of equipment with others and you will see the superiority. They are as cheap as good machines can be, and satisfactory service is guaranteed.



"Western" Gyrating Cleaner

**UNION IRON
WORKS**
Decatur, Illinois, U.S.A.

Complete Line of Shellers Kept at
1221-1223 Union Avenue
Kansas City, Mo.



"Western" Warehouse Combined Sheller

TRIBUNE: FRIDAY, SEPTEMBER 28.

SIP OF THE PIT

o have been
days, not
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Interior millers are not displeased at the slow movement of wheat to primary markets. C. A. King & Co. had the following from an Indiana miller: "One would think by the appeal to farmers to sell wheat that some one was starving or that the farmers were unpatriotic. No one can carry the wheat any cheaper than the farmer. Let him carry it until we need it. The millers in Indiana and Ohio have to live; we don't want all of the wheat shipped out of the country in August and September. We will need it much worse in March and April than we do now. Why pay commission and freight both ways? Handle this wheat with the least expense to the consumer. Grind it in the nearest mill. Stop congesting the railroads by shipping wheat to the big centers and then shipping flour back. Farmers ought not and are not stopping their farm work to haul wheat now."

PORK
TO

She

From the
Chicago
Tribune of
Sept. 28th.

"Why pay commission and freight both ways? Handle this wheat with the least expense to the consumer. Grind it in the nearest mill. Stop congesting the railroads by shipping wheat to the big centers and then shipping flour back."

Just Exactly the Idea Behind the AMERICAN MARVEL MILL

The American Marvel Mill made in six capacities, from 25 to 100 barrels per day.

—In 1200 communities it has proved its greater economy over other milling equipment by cutting labor and power expense in half.

—Can be operated by one man. A small motor or oil engine furnishes all driving power.

—Is no experiment. Seven years of solid success behind it. Hundreds of experienced millers prefer it to long-system equipment.

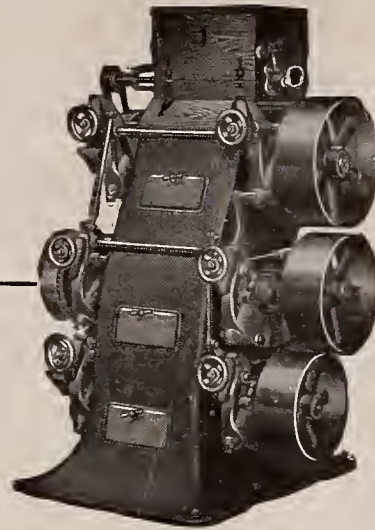
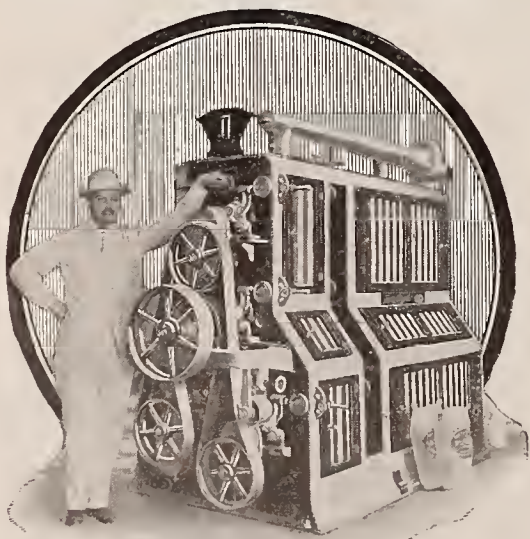
—Requires no milling experience. Easy to run, simple to care for.

—Produces quality and yield as high as can be had with any mill.

Sold on thirty days trial, you to be the sole judge.

Write us today for owners' testimonials and full information.

Anglo-American Mill Company, Inc.
445 Trust Building, Owensboro, Ky.



You need this sturdy, capable, general purpose mill

For grinding feed, table corn meal, pearl meal, linseed, etc., you can use this mill with great profit. This mill is built by men who know milling conditions, for those who want the best in milling equipment.

N. & M. Co. Three Pair High Mill

It has the characteristic N. & M. Co. rugged strength combined with flexibility of operation necessary to handle widely different stocks. Will grind extremely fine, medium or coarse, just as you wish.

Solid one piece cast frame—doors for examining stock beneath each pair of rolls—Ansonia rolls with our easy running, long wearing, collar oiling bearings—one lever simultaneously spreads or closes all three pairs of rolls—any pair of rolls may be removed without disturbing the others—furnished with either belt or gear drive on slow side.

See book on Mills, No. 1290 for details.
If you haven't got it we will send it on request.

Everything
for the
Modern
Mill

**Nordyke &
Marmon Co.**
INDIANAPOLIS, IND.

Established 1851

Ask for
Catalogs
on any
Equipment
you need

America's Leading Mill Builders



Higher Wheat Prices at Buffalo

THE BUFFALO CORN EXCHANGE

ANNOUNCES that on October 25th the Buffalo market on all rail wheat was put on the same price basis as New York, which is as follows:

*Prices Are Delivered New York, Less Export
Rate to New York*

No. 1—Northern Spring . . . \$2.28	No. 1—Red Winter \$2.28
No. 1—Hard Winter 2.28	No. 1—Soft White Winter . . 2.26
No. 1—Durum 2.28	No. 1—Mixed Winter 2.26

No. 2 of each of above grades 3c per bushel less than No. 1 grade.

No. 3 of each of above grades 6c per bushel less than No. 1 grade.

No. 4 and No. 5 wheat shall be sold on its merits, No. 4 not to be sold at higher than 1c under No. 3, and No. 5 not to exceed 2c under No. 3.

Sample wheat shall be sold on its merits, but not at a price in excess of No. 1.

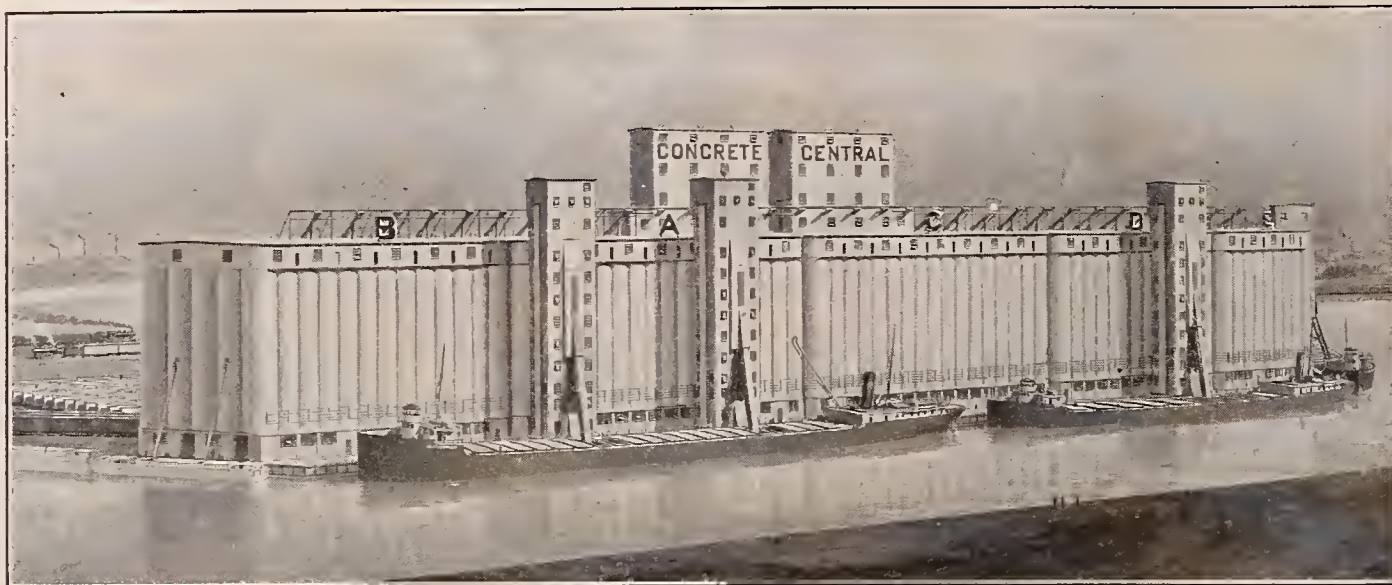
Wheat grading 1, 2 or 3 with notation "smutty" shall be sold at not to exceed 2c under prices fixed for wheat grading the same but without notation "smutty."

Sample smutty wheat may be sold on its merits, but at a price not exceeding the No. 3 grade.

This makes Buffalo absolutely the best market for your wheat for following reasons:

1. There is no competitive market on a higher basis.
2. Your shipments will reach Buffalo in much less time than they would reach the seaboard, which means lower interest charges and smaller chances of deterioration.
3. No market has a lower commission rate than one cent per bushel, which is the charge in this market.
4. Buffalo is a large milling center, and is using a larger proportion of winter wheat than it ever did. Its present daily requirements of winter wheat are 30,000 to 50,000 bushels. Its present daily total milling requirements are 150,000 to 200,000 bushels.

Ascertain the export rate from your station to New York.



CONCRETE-CENTRAL ELEVATOR, CAPACITY 4,500,000 BUSHELS

THESE "MONARCH ELEVATORS" make it possible to handle expeditiously and economically Buffalo's 200,000,000-bushel Grain Business.

Houses of "Monarch" construction are excelled by none in design, arrangement, and economy of operation.

Other "MONARCH" Elevators in Buffalo and Vicinity

Wheeler
Monarch
Connecting Terminal

Kellogg
Buffalo Cereal Co.

Superior
Geo. J. Meyer Malting Co.
Shredded Wheat Co.

CONSULT US BEFORE BUILDING

Monarch Engineering Company

Engineers and Contractors

Buffalo, N. Y.

FIRST PUBLIC ANNOUNCEMENT

The engineer who designed the well-known S—— Separator and thereby showed to the world how well he could separate oats from wheat, has patented another and infinitely better machine and one which fairminded, conservative experts say will entirely revolutionize the handling of grain and seeds. Cars of wheat and barley cleaned in Minneapolis by one of these new Separators and shipped to some of the most critical buyers in the East have created a furore of excitement. The wires have been kept busy with telegrams asking how the cleaning had been done and the name of the cleaner. Elevator men have traveled 1500 miles to see machines in operation. Orders have been placed for Separators to be shipped by express. One customer figures that his machine will earn him a clear profit of \$5500.00 in a year. According to present indications there will be an enormous demand for these machines. It would, therefore, be well to place orders now, thereby securing a high position on our rotational delivery list.

If you are interested in a universal cleaning machine
for grains and purposes too numerous to mention

DO NOT MAKE YOUR CHOICE UNTIL YOU HAVE HEARD OUR STORY.



The S. Howes Company, Silver Creek, N. Y.





Canadian Government Railway's Elevator TRANSCONA, MANITOBA

Now under Construction.

Capacity of Plant: 1,000,000 Bushels.

Designing and Consulting Engineers for Entire Work

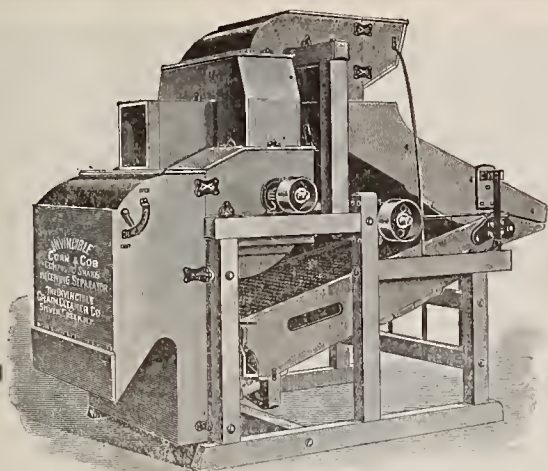
John S. Metcalf Company, Limited

GRAIN ELEVATOR ENGINEERS

54 St. Francois Xavier Street, MONTREAL, CANADA

108 South La Salle Street, CHICAGO, ILL., U. S. A.
395 Collins Street, Melbourne, Australia

35 Southampton Street, LONDON, W. C., ENGLAND

*It's a Marvel—the*

INVINCIBLE

Corn and Cob Cleaner and Separator

when it comes to cleaning corn and small grain. Here's what it does: We guarantee this machine to take mixed corn direct from sheller, throw out the cob, remove the silk and fine dirt and to deliver the corn in perfect condition—all in one operation.

A second set of screens is instantly ready for other grains—by throwing a simple lever.

Write for prices and particulars.

INVINCIBLE GRAIN CLEANER CO., Dept. Silver Creek, N. Y.

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Chicago, Ill., 1041 Webster Bldg. A. H. Kay
Bristol, Tenn., 111 East 5th St. H. C. Purvine
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Kansas City, Mo., 211 Postal Bldg. . . . F. J. Murphy
Minneapolis, Minn., and Winnipeg, Man. . . .
Strong-Scott Mfg. Co.
Philadelphia, Pa., 5774 Hunter St. . . . C. Wilkinson
Fremont, Ohio, Box 363 Bert Eesley
San Francisco, Cal., 17th and Mississippi . . .
W. King, Pacific Coast Representative

M. E. Nichols & Co.
Dinwiddie, Ind.
are placing a No. 5

U. S. Grain Standardization Bureau Orders 36 Additional Emerson Wheat Testers ENOUGH SAID!

An additional lot of 36 Emerson Wheat Testers or Kickers to those already in use were ordered June 12 last for distribution among the different laboratories and inspection departments of the U. S. Grain Standardization Department. The Emerson Tester or Kicker has also been recommended to the grain trade by the Government officials as the most satisfactory machine for determining the actual amount of dockage in each sample of wheat.

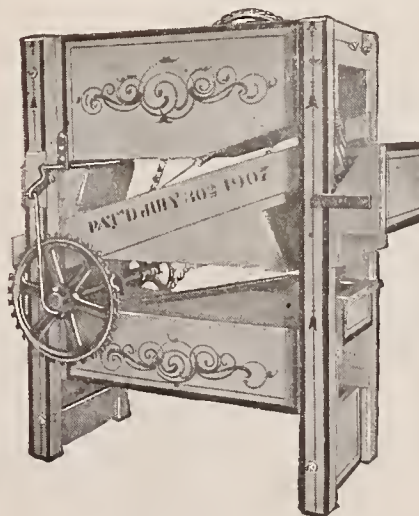
The Emerson makes an absolute perfect separation of the oats from the wheat, not one kernel of oats left in the wheat and not a kernel of the wheat lost with the oats. Eliminates all guess work. All disputes between buyer and seller are settled on the spot. Avoids any feeling about doubtful dockage. Farmers prefer selling where the test is made with the Emerson Tester or Kicker.

Over 7,000 Emersons In Use

Any number of elevator companies are using from 25 to 50 Emerson Kickers and from that on the 250 depending upon the number of elevators they operate. Hundreds of smaller elevator companies are using from 1 to 5 machines. In addition there are hundreds of flour mills, state grain inspection departments, commission houses, grain buyers, boards of trade and U. S. Grain Standardization Bureau all using Emerson Kickers.

The Emerson Guarantee

The Emerson Kicker is sold with an absolute guarantee to do exactly as we claim or money will be refunded. It has proved itself to be a splendid investment of elevator and milling companies. Let us prove it to you. Write today for pamphlet giving full description and unsolicited comments by prominent Emerson users.



W. H. EMERSON & SONS

Detroit, Mich.

Windsor, Ont.

It Will Last

Reinforced concrete. Built for heavy floor loads.
Uses the daylight. Tracks arranged right.

"Macenco Results"



1500 barrel Mill, 300,000 bushel Elevator and
500 H. P. Diesel Power Plant of the Kansas
Flour Mills Company, Great Bend, Kansas.

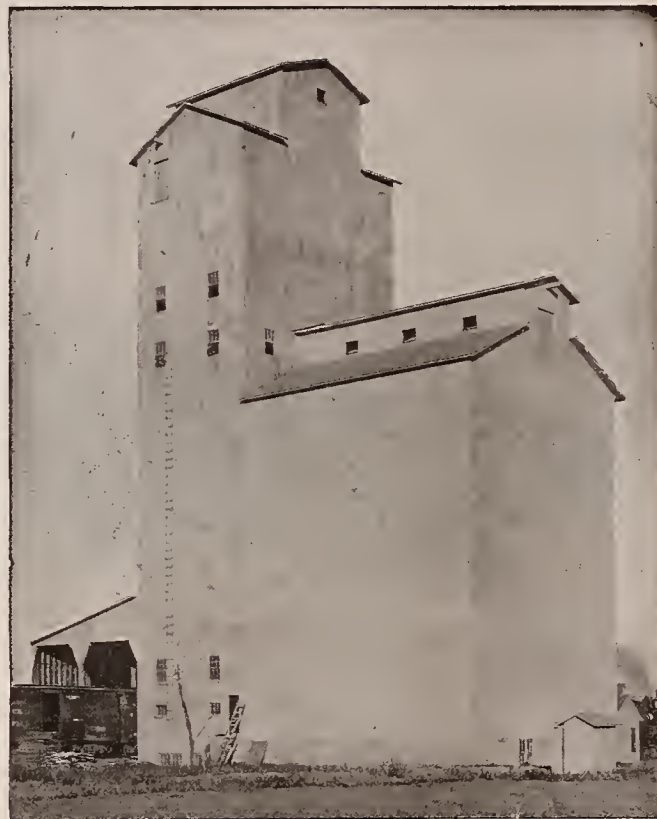
Macdonald Engineering Company

53 West Jackson Boulevard,
CHICAGO

Burrell's 1916 Record

**97
Contracts**

With the largest
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Engineering
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Construction
Organization
for large or small
work ever gather-
ed together by a
concern in our
line, prospective
builders of Grain
Elevators will find
it to their advan-
tage to consult us
before formulating
any definite plans.
It Costs Nothing.



Van Wickle Grain and Lumber Co., Council Bluffs, Ia.

**Complete Grain Elevators and Mill Buildings,
Concrete or Wood**

Burrell Engineering & Construction Co.

Webster Building, CHICAGO.

PORTLAND, ORE.

715 Herskowitz Building, Oklahoma City, Okla.

Notice to Policy Holders

One reason why you
should exercise un-
usual care and dili-
gence in protecting
your property against
fire is the delay and
difficulty you would
have in securing re-
pairs or rebuilding ow-
ing to War Conditions.

LET US HELP YOU WITH OUR SERV-
ICE ON ALL KNOWN HAZARDS.

Mutual Fire Prevention Bureau
OXFORD, MICHIGAN.

REPRESENTING:

Millers National Insurance Co.,
Chicago, Ill.

Western Millers Mutual Fire In-
surance Co., Kansas City, Mo.

Ohio Millers Mutual Fire In-
surance Co., Canton, Ohio.

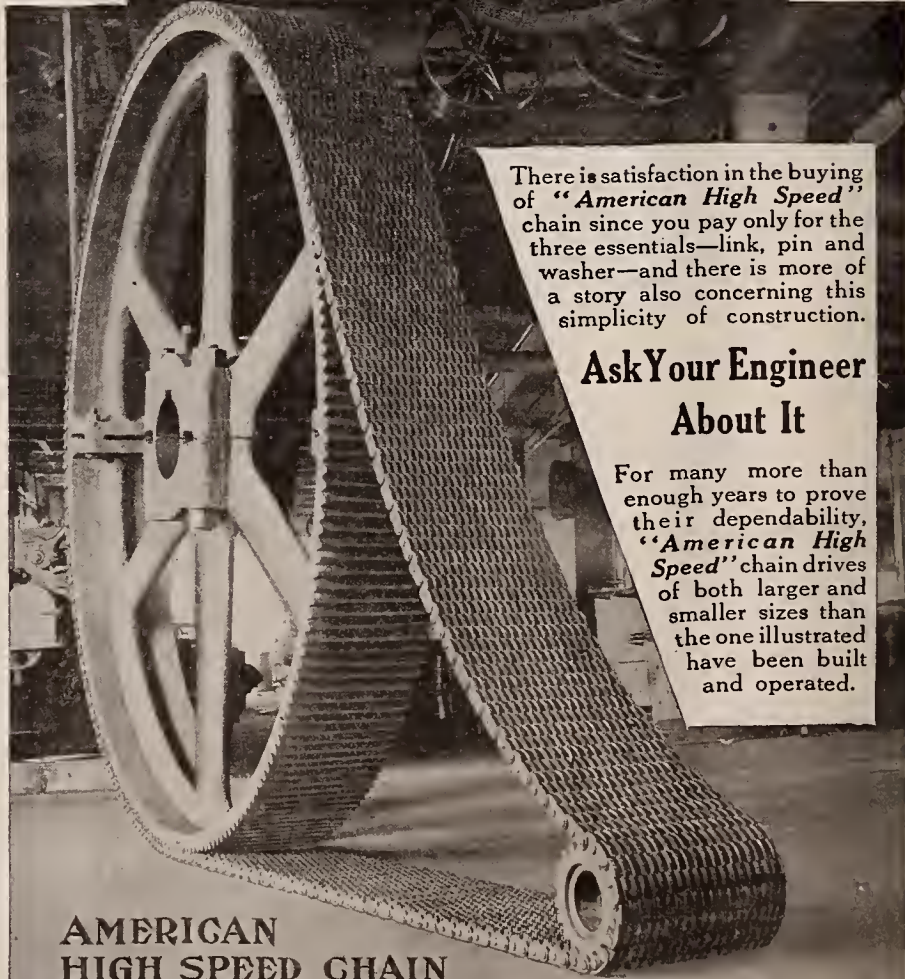
Pennsylvania Millers Mutual Fire
Ins. Co., Wilkes-Barre, Pa.

Mill Owners Mutual Fire Insur-
ance Co., Des Moines, Iowa.

The Millers Mutual Fire Insur-
ance Co., Harrisburg, Pa.

Texas Millers Mutual Fire Insur-
ance Co., Fort Worth, Texas.

Michigan Millers Mutual Fire In-
surance Co., Lansing, Mich.



There is satisfaction in the buying
of "American High Speed"
chain since you pay only for the
three essentials—link, pin and
washer—and there is more of
a story also concerning this
simplicity of construction.

**Ask Your Engineer
About It**

For many more than
enough years to prove
their dependability,
"American High
Speed" chain drives
of both larger and
smaller sizes than
the one illustrated
have been built
and operated.

**AMERICAN
HIGH SPEED CHAIN**

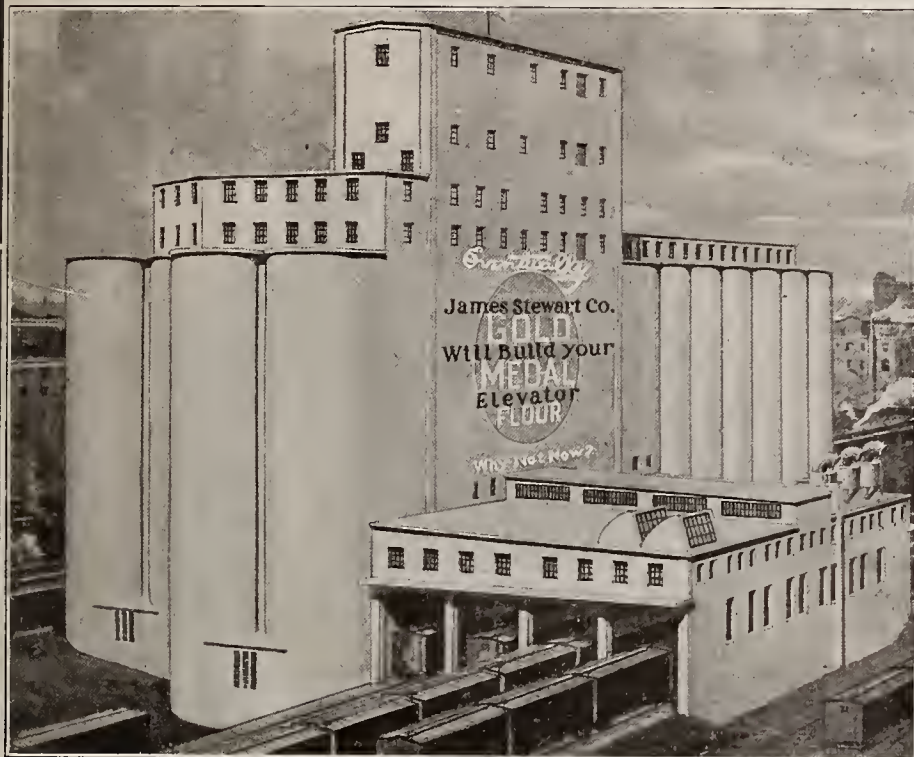
"Most Horse Power Years Per Dollar"

ABELL-HOWE COMPANY
NATIONAL DISTRIBUTOR
CHICAGO



**TWO MILLION BUSHEL FIRE PROOF
RECEIVING ELEVATOR**

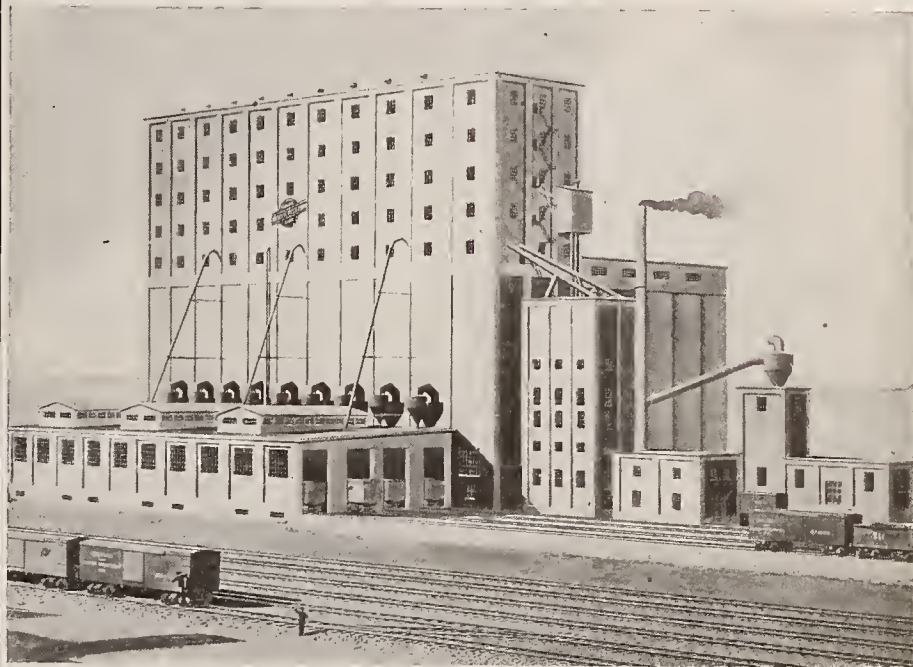
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Washburn-Crosby Company
Minneapolis, Minn.*Write us for designs and estimates*

We Design and Build Elevators, any type of construction, in any part of the World.

JAMES STEWART & CO., Inc.
GRAIN ELEVATOR DEPARTMENT

Fifteenth Floor of Westminster Building

W. R. SINKS, Manager**CHICAGO, ILL.**Chicago & Northwestern Railway Company's New
Reinforced Concrete Grain Elevator Being Built
at Council Bluffs, Iowa, for the Updike
Grain Company of Omaha, Neb.Our experience covers every branch of grain elevator
building work as well as any type or style of construc-
tion to meet requirements in any locality.*Designs and estimates promptly furnished.***Witherspoon-Englar Company**

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Telegraphic Cipher*Revised Edition*

Cloth Binding - - \$1.50

Leather Binding - \$2.00

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431 So. Dearborn Street, Chicago

Reliance Construction Company**Furnish Plans, Estimates and Build
COUNTRY GRAIN ELEVATORS**Our long experience as a builder of elevators insures you an
up-to-date house. Write today.

625 Board of Trade Building,

INDIANAPOLIS, IND.**CONTRACTORS FOR
Grain Elevators**COMPLETE WITH
MACHINERY INSTALLATION.**DEVERELL,
SPENCER & CO.**GARRETT BUILDING
BALTIMORE, MARYLAND**The Barnett & Record Company**
GENERAL CONTRACTORS

Designers and Builders of

Grain Elevators, Flour Mills and Heavy StructuresReinforced Concrete and Steel Ore Dock con-
structed at Superior, Wisconsin, for the Allouez
Bay Dock Company. Entirely Fireproof.*Write for Designs and Estimates*

OFFICES:

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Duluth, Minn.

Fort William, Ontario

BE PREPARED!

Conditions inevitable during war make it essential for all business to be conducted on conservative lines. By installing

BEALL Warehouse and Elevator Separators

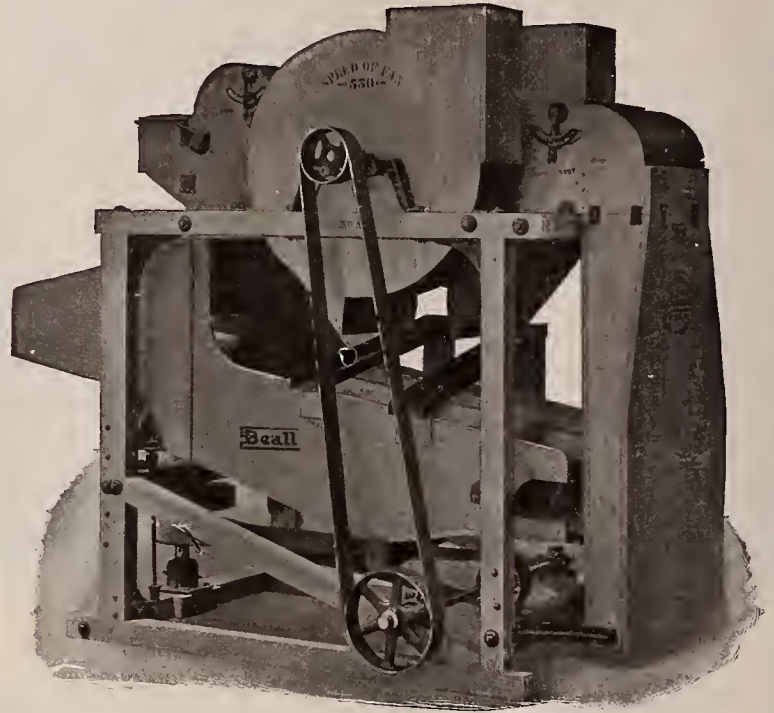
in your elevator you are prepared to meet any demands that might be made upon you, and your operating expense will be reduced to a minimum.

Beall
THE MARK OF QUALITY

Poorly cleaned grain will surely reduce your profits, so it will pay you to investigate the BEALL Separator before buying any other machine. It will only take a minute to write for our descriptive catalogue, and it may save you many dollars later.

Built in Ten Sizes—Guaranteed Without Limit

The Beall Improvements Co., Inc.
Decatur Illinois



Valuable Mill and Elevator Property for Sale by Tender

Sealed tenders will be received by the undersigned up to noon of Saturday, November 24th, 1917, for the purchase of 350 Bbl. Roller Flour Mill, Flour Warehouse, Cereal Mill and a Half-Million Bushel Grain Elevator, situated on the water front at Kingston, Ont., Can.

Elevator has dock front with a depth of 20 feet of water.

Grist Mill is of brick construction, fully equipped with modern machinery, manufactured by Allis-Chalmers Mfg. Co. Size of building, 65 x 88 ft.

Flour warehouse is 65 x 36 ft.

Cereal Mill would make an up-to-date feed mill, is 65 x 113 ft., concrete construction, five stories high.

Mill is supplied with up-to-date steam plant with which it was formerly operated. Electric power is now available.

Plant has both C. P. Ry. and G. T. Ry. trackage and is situated in the best stock feeding district in Canada.

Tenders will be considered for the elevator separately, and the Flour Mill, Warehouse and Cereal Mill combined or for all together.

Further particulars may be obtained from the undersigned,

**Messrs. W. H. DWYER, Metropolitan Building,
Ottawa, Ont., Canada, and**

**JAMES H. HALL, Laurentian Building, Ottawa,
Ont., Canada**

Property may be examined at any time upon application to J. F. Leslie, Kingston, Ont.

The lowest or any tender not necessarily accepted.

OSBORNE & BROADFOOT
Solicitors for
Vendor

FORWARDERS LIMITED
Metropolitan Bldg.
OTTAWA, ONT., CAN.

They All Point to the Bowsher

A mill that will crush or grind ear corn (with or without shucks), Kaffir in the head and all kinds of small grain.

A mill that has conical shaped grinders—which do the work close to the center of the shaft, thus effecting a great saving of power.

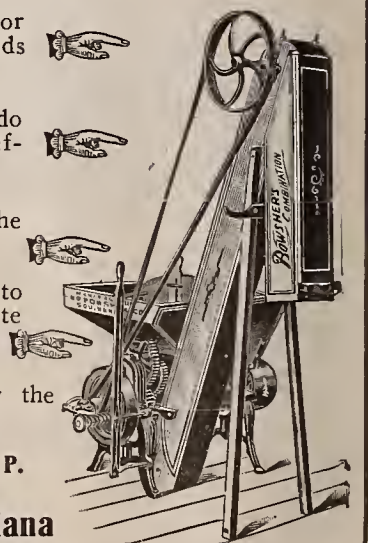
A mill that can run empty without injury, as the grinders will not strike together.

A model feed mill, light running and handy to operate; different from all others. A complete independent outfit.

These are a few of the many reasons why the Bowsher is the mill for you.

Sold with or without elevator. 10 sizes, 2 to 25 H. P.

N. P. Bowsher Co., South Bend, Indiana



The "Knickerbocker Cyclone" Dust Collector

For Grain Cleaners

ALL STEEL

Write for Catalog



The Knickerbocker Company

Jackson, Mich

GOODRICH

GRAIN ELEVATOR BELTS



have made good with a punch wherever they have been used since the day when first the keen, analytical minds of the expert rubber belt makers of the "House of Goodrich" began the development of a master belt for the well defined grain elevator field.

Their grand average for continuous service in American grain elevators has automatically elevated the Goodrich product into an exclusive niche in the Belt "Hall of Fame."

You don't have to know a great deal about our Grain Belt to buy it. We have analyzed it's possibilities much better and more thoroughly than you could do and our analysis and judgement are being backed up with flawless service every day, everywhere. We make belts that "win big." We can't afford to do otherwise.

It Is *Known* What a Goodrich Belt Can Do

THE B.F. GOODRICH COMPANY

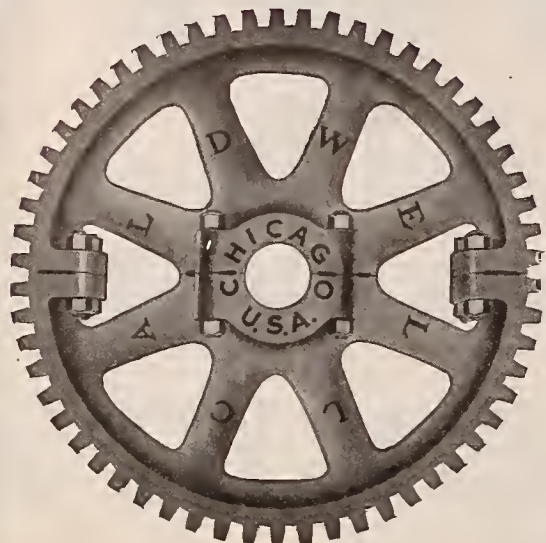
Makers of The Celebrated Goodrich Automobile Tires—
"Best in the Long Run"

Factories: AKRON, OHIO

Representation Everywhere



Machine-Molded Gears

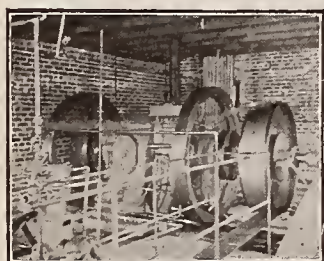


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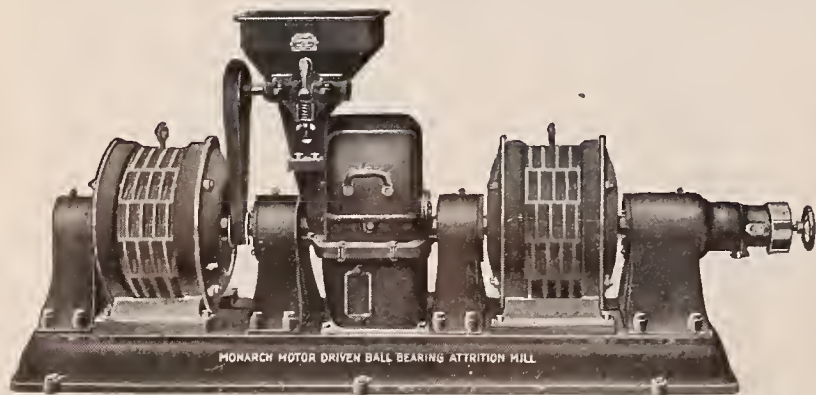
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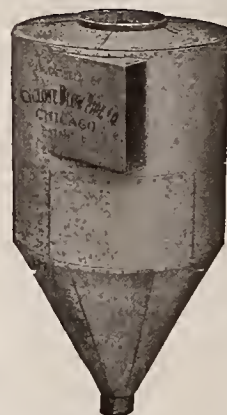
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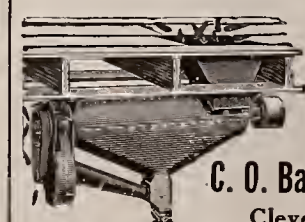
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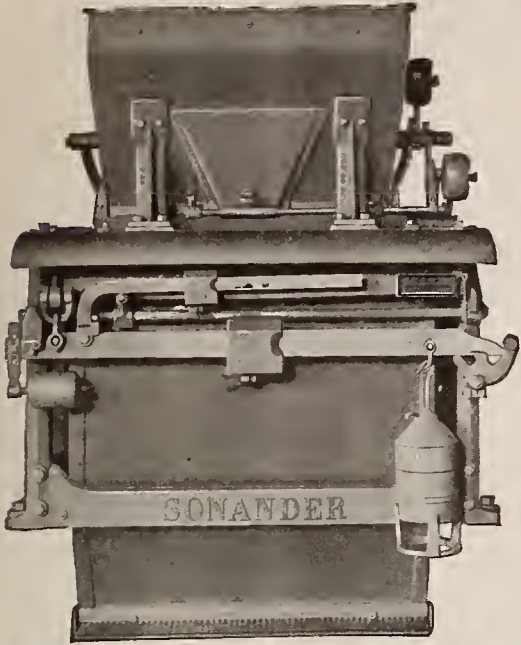
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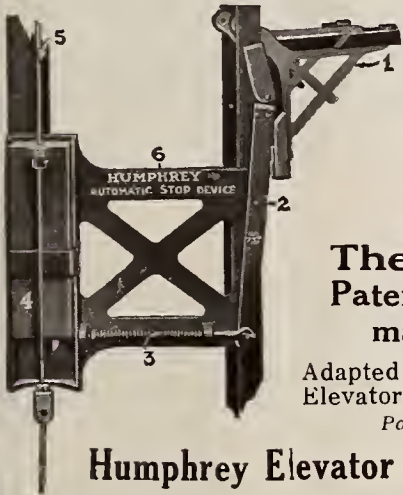
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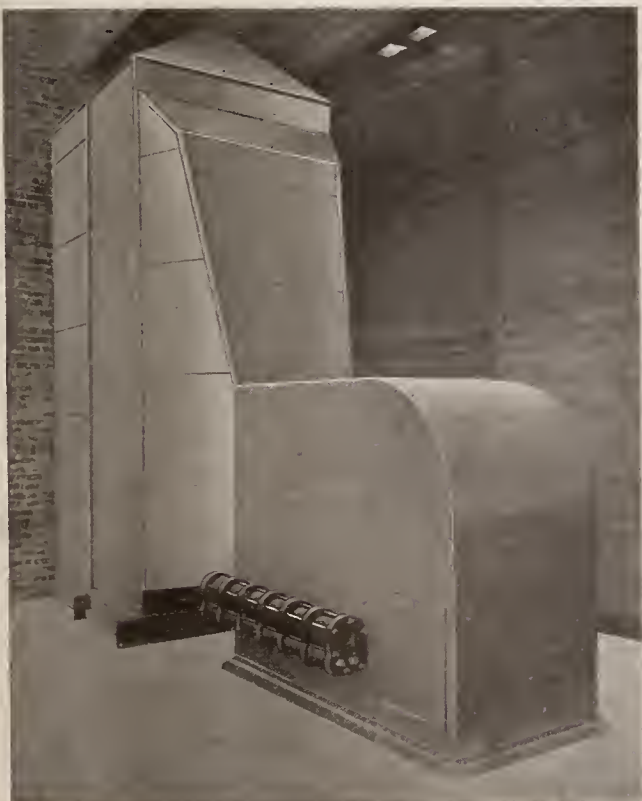
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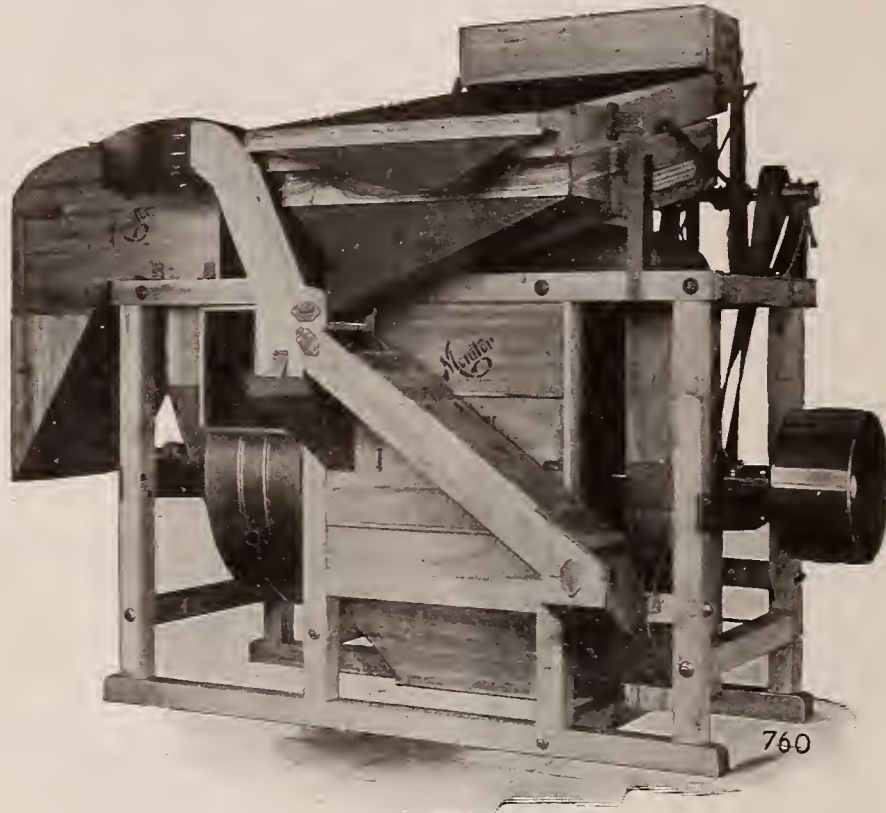
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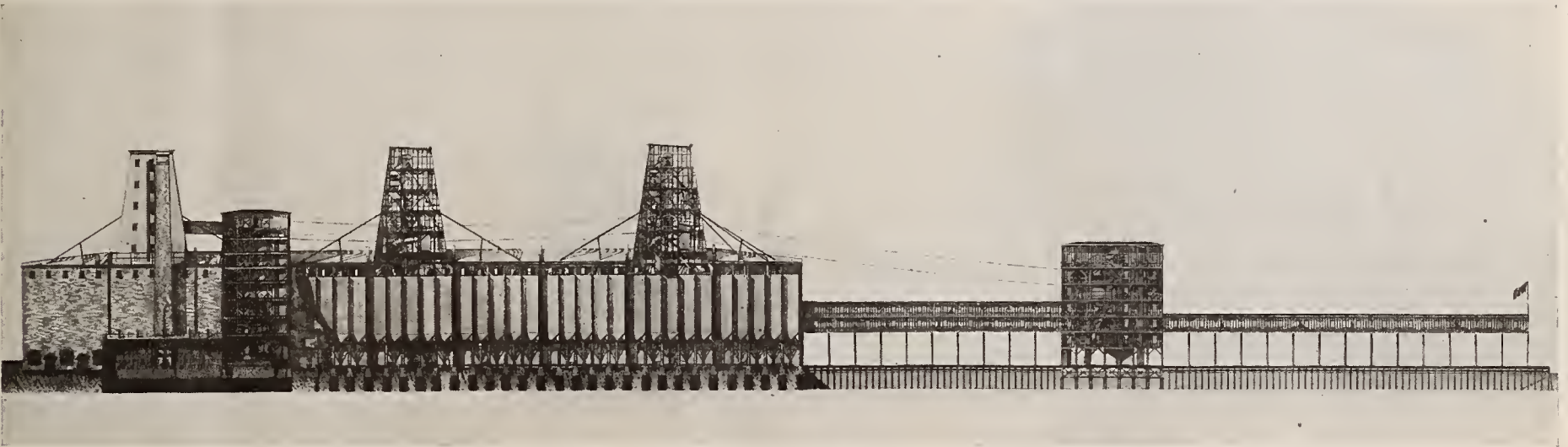
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CHICAGO, ILLINOIS, NOVEMBER 15, 1917.

No. 5



VIEW OF DOWS' STORES, BROOKLYN, N. Y., FROM A PICTURE MADE SHORTLY AFTER CONSTRUCTION ABOUT 40 YEARS AGO

Destruction of Dows' Stores at Brooklyn

Suspicious Fires Cause Almost Total Loss of Big Grain Storehouse—Nearly 1,000,000 Bushels of Grain Belonging to the Allies Is Burned

BY. C. K. TRAFTON

DOWS' STORES, for about 40 years a landmark on the Brooklyn side of the East River, opposite the lower end of Manhattan Island (New York City) and known in the grain trade as one of the largest grain storehouses in the East (and certainly the largest of its kind), was almost entirely destroyed by a fire of decidedly suspicious origin, which broke out on the morning of Saturday, October 13, and then blazed forth again in the ruins several days later, after seemingly being extinguished.

These stores, which are now owned by the New York Dock Company, covered a space about three city blocks, between Columbia Street and the East River, running from Pacific to Amity Street, being roughly 600 feet long by 100 feet deep. There were nine stores, divided into three groups, the main building being about 81 feet high, with a tower for each group rising 103 feet from the piers. The total capacity was placed at between 2,000,000 and 2,500,000 bushels.

The first fire started at 8:20 a. m. in Tower No. 2 over Stores 1, 2 and 3. The men working in that section smelled smoke and upon going to a corn loft to investigate were bowled over by an explosion and thrown down a flight of stairs. Fire Marshal Brophy stated that the fire was due to spontaneous combustion, causing an explosion of grain dust. Fire Chief Kenlon, on the other hand, admitted the possibility that the fire was caused by bombs. There was no direct evidence of this, but Chief Kenlon could find no evidence of dust explosion and two U. S. Customs guards who were on the piers stated that they heard two distinctly bomb-like explosions. William Tomlins, superintendent of the stores, who turned in the first alarm, stated subsequently that he did not believe that spontaneous combustion had caused the explosions as the inside of the elevator was kept scrupulously clean to avoid such an accident.

The force of the explosions blew off the roof of Tower No. 2 and threw it into the East River and the tower was immediately in full blaze. Within an hour and a half this tower collapsed, and in

spite of the heavy brick walls separating the different groups stores 4, 5, and 6 were in flames two hours after the fire started. Owing to the box-like construction of the buildings, and the absence of fire-escapes, ladders, and outside stairs along which hose could be stretched, the firemen were seriously handicapped.

Barring sub-section No. 1 which was temporarily saved because the wind was blowing in the other direction, the entire edifice became a mass of flames and second and third alarms were sent in. Chief Kenlon who came on the latter sent in a fourth, calling out all available Brooklyn apparatus and some from the lower end of Manhattan Island. The fire-boats *William L. Strong*, *New Yorker*, and *Gaynor*, were soon doing their share from the water-side, ably assisted by about five Erie and Lackawanna Railroad tugs.

The long frontage on the river and the conspicuous structure of the buildings made the fire one of the most spectacular in the history of the shipping district. The volume of smoke during the first day and the flames at night when the secondary fire occurred made a picture that will always be remembered by those who saw it. So dense was the smoke that it penetrated nearby tenements and all but strangled the entire inhabitants of the district. Many persons were rendered unconscious by the fumes and were rescued with difficulty, a pulmotor having to be resorted to before they could be restored. In addition to the smoke, the high southwest wind carried into the crowded tenement district clouds of burning brands and red-hot cinders, which rained down over an area of several blocks and kept constantly increasing the danger of extension of the fire. As practically the entire force of fire apparatus was already engaged, this added much to the anxiety of the chief and the panic of the tenement dwellers.

The fire, which Chief Kenlon described as the worst he had known since the famous Equitable Assurance Company Building fire which destroyed a whole block in the big "skyscraper section" of lower Broadway on one of the coldest days of the

winter of 1912, seemed to be completely subdued on Monday morning. Nevertheless, it must have been smoldering far down in the ruins, working its way along some passageway under ground, as it broke out again on Monday night in the section that had escaped the original blaze. This secondary fire gave the firemen another stubborn fight and caused a loss of possibly a quarter million dollars, in addition to the first loss of about two millions. Much dissatisfaction was caused in fire insurance circles because of the second outbreak and an investigating committee was appointed by the Fire Insurance Exchange.

According to the New York Dock Company's records, the following grain was in the stores previous to the fire: Corn, 25,463 bushels; Oats, 35,143 bushels; Linseed, 75,798 bushels; Barley, 542,139 bushels; Barley screenings, 3,468 bushels; Wheat screenings, 19,460 bushels; Buckwheat, 39,427 bushels. The fact that practically all of this grain was awaiting shipment to the Allies seemed to lend color to the claims that the fire was of incendiary origin. Moreover, the fact that three other big fires in or near Brooklyn started on the same day aroused suspicion and thorough investigations are being conducted by fire department officials, the police, and secret service agents.

Testimony in a case of this kind is apt to be confusing. While all witnesses agree that there was an explosion, it would be practically impossible to tell from the sound whether it was caused by grain dust or planted bombs. In addition to the uncontroverted testimony of the scrupulous cleanliness of the premises, the fact that there have been 56 waterfront fires in New York recently, in spite of extraordinary precautions, points rather strongly to the need of America waking up to the fact that Germany is not confining her activities to the battle fronts in Europe, but is directing a vast and well organized raid on all industries in this country which are assisting in the prosecution of the war or in supplying our Allies with food.

The original of the illustration on this page



FIREMEN ON ROOF AND FIRE TUGS INEFFECTUALLY FIGHT THE FIERCE DOWS' STORES FIRE
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which shows the elevator as it was before the fire came from Mr. James Macdonald, president of the Macdonald Engineering Company, Chicago. It is interesting, not only as showing the arrangement of elevators of the time when this plant was built, but also because it was the first elevator designing contract with which Mr. Macdonald was connected. He was associated with the late George C. Mallory of New York in the planning and construction of the plant.

FREIGHT RATE WAR TAX IN EFFECT

BY SYDNEY A. HALE.

The 3 per cent tax upon transportation charges authorized by the War Revenue Act approved by President Wilson on October 3 went into effect November 1. The levy will be made by the railroads for remission to the U. S. Government under Section 500 of the Act which provides "that from and after the first day of November, 1917, there shall be levied, assessed, collected and paid a tax equivalent to three per centum of the amount paid for the transportation by rail or water or by any form of mechanical motor power when in competition with carriers by rail or water of property by freight consigned from one point in the United States to another."

Interpretation of the Act has already been the subject of conference between the accounting officers of the carriers and representatives of the Internal Revenue Commissioner. As a result of these conferences, a distinction is made between prepaid and collect shipments in transit prior to but not delivered until or subsequent to November 1. The construction placed on the law is as follows:

The tax will apply upon all collect shipments reaching destination on or after November 1, regardless of the fact that such shipments may have been in transit before midnight October 31.

The tax will not apply upon (a) shipments upon which the entire transit service was performed prior to November 1, regardless of when charges are actually paid; (b) prepaid consignments received for which bill of lading was issued prior to midnight October 31, and (c) freight charges uncollected as of midnight October 31 on freights received collect provided the freight therefore was received before midnight October 31.

The tax will not apply upon switching services performed prior to midnight October 31, although payment therefor may not be made until after November 1. Conversely, the tax will apply upon switching services paid for prior to November 1 where the service was not actually performed until

or after November 1. Where switching, drayage, wharfage, storage, lighterage, compression-in-transit, milling-in-transit, reconsignment charges or refrigeration services are included in the through rate for the road-haul movement, no additional tax will accrue for such services. Neither will the tax apply to charges made for car service, demurrage, consignment freight "to order notify," storage, car rental and weighing. Industrial switching, not included in road-haul rates, is subject to the tax.

As will be seen from the section of the act quoted in the first paragraph, the tax does not apply upon shipments destined to Canadian, Mexican or ocean points. "If, however," say the railroads in qualification of this provision, "a shipment intended for export be consigned to a port agent and it moves to the port on a port lading, the transportation costs on it will be subject to the tax."

As a matter of practical application, the most intricate question that will be faced in connection with the new tax is the assessment upon shipments of commodities entitled to transit privileges such as milling, dressing, fabrication and refining. A tentative agreement, subject to the approval of the Secretary of the Treasury, has been reached that the measure of the tax shall be three per cent of the amount paid for the transportation of the finished product from the starting point of the raw material to the final destination of the finished or milled product and that such tax shall be paid as and when such transportation charges are paid. Amounts paid for transportation to transit points upon traffic not reshipped therefrom are also subject to the tax.

When transportation charges are paid upon the raw material into the transit point, a 3 per cent tax will be collected at the same time, regardless of the fact that the freight rates may be locals subject to readjustment upon movement of the finished product out of the transit point. When readjustments of charges are made on the outbound movement to the basis of the proper through rate, there will also be a readjustment and refund of a proportionate amount of the tax paid on the movement into the transit point. "By such a process," explain the carriers, "the transportation cost on the milled or finished product becomes subject to the full tax, so that, if the transportation costs on the milled product, originating point of raw product to destination point of the finished product, be prepaid at the milling point, the agent collecting the transportation costs must also collect 3 per cent tax on the full amount thereof. If the milled product be billed collect, the tax must be collected by the agent at destination of the finished product."

TOO HIGH GRAIN DOORS

If grain doors are so high that an inspector is required to remove some of the boards before he can get into the car for his samples, he is justified in refusing to inspect the car, according to a recent announcement by the Department of Agriculture.

After relating the many instances in which grain doors are built much higher than necessary to protect properly leveled grain, the announcement says:

It is possible that, in accordance with these provisions, a licensed inspector would be justified in refusing to inspect a car in which the grain doors were so high that he could not enter, on the ground that the grain was not offered for inspection and grading under conditions which permit the taking of a correct and representative sample. If he did so, and was justified in his refusal, it would then be necessary for the shippers to incur the expense of having the doors placed in proper condition or the grain made accessible otherwise. If the shipper did not do this, and the car was not inspected, the shipper might be subject to criminal prosecution in accordance with the provisions of section 4 and section 9 of the Act.

It is suggested, (1) that shippers of grain follow the suggestions as to the loading of their grain contained in the poster, "Get high grades for your corn," recently issued by the Department of Agriculture; (2) that they level the grain in the cars, being careful in all instances to build the doors high enough to prevent grain leaking over the doors; and (3) that they do not build the doors higher than necessary to prevent such leakage. It is believed that if these suggestions are followed, the work of licensed inspectors and those engaged in the supervision of the inspection of grain will be facilitated, the cost of inspection will be somewhat reduced, and the danger of leakage, due to the removal of upper parts of doors by licensed inspectors, will be avoided.

AMENDMENTS TO REGULATIONS OF GRAIN STANDARDS ACT

Several amendments to the rules and regulations, promulgated by the Secretary of Agriculture under the Grain Standards Act, have been made recently and are contained in Service and Regulatory Announcement No. 26, of the Bureau of Markets. The changes in the rules are as follows:

In Regulation 2, between sections 5 and 6, insert a new section, as follows:

"Sec. 5A. Each license and identification card issued under this regulation shall cover all the kinds of grain which the licensee is authorized to inspect, grade, and certificate the grade of, under the Act and the rules and regulations prescribed thereunder. In case an applicant for a license for any grain holds a license for any other kind of grain, he shall, immediately upon receipt of a new license and identification card, return to the Secretary of Agriculture the license and identification card then held by him.

Regulation 2, section 12, has been amended by the addition of a new paragraph 2, relates to the in-inspection of heavily loaded cars, which was printed in full in a recent issue of this journal.

The third amendment relates to the size of type on the certificate.

The fourth amendment is as follows:

In regulation 2, section 6, strike out all of the second sentence, and in lieu thereof, insert the following:

"Upon a written request and a satisfactory statement of reasons therefor, submitted by a licensed inspector, the Secretary of Agriculture may suspend, for a definite or indefinite period of time, or may cancel, the license issued to such licensed inspector.

In all other cases, before a license is suspended, revoked, or canceled, the licensed inspector involved shall be furnished by the Secretary of Agriculture, or by any official of the Department of Agriculture designated for the purpose, a written statement specifying the charges, and shall be allowed a reasonable time within which he personally may answer the same in writing and submit affidavits and other proper evidence."

The following is the fifth amendment:

In regulation 2, section 7, paragraph 2, after the word "Paragraph," strike out the figure "2," and, in lieu thereof, insert the figure 3; and, immediately following paragraph 1, insert a new paragraph as follows:

"Paragraph 2. Upon a written request and satisfactory evidence of competency, submitted by a person whose license has been suspended or canceled in accordance with the second sentence of section 6 of this regulation, the Secretary of Agriculture, without again requiring compliance with sections 1 and 2 of this regulation, may terminate the period of suspension or may issue to such person a new license for the kind of grain covered by the canceled license."

The Licensing of Grain Elevators

Enlarged Scope of Licensing Operations Outlined—Blanket License a Simplifying Method—Reports Required December 1—Rules and Regulations Summarized

BY WALDON FAWCETT

Washington Correspondent of the "American Grain Trade."

AFTER vexatious delays and mix-ups that have caused many a grain man to cuss over official "red tape," the elevator licensing system of the U. S. Food Administration—even the new features of it necessitated by the President's latest proclamation—is now pretty well "shaken down." Most elevator proprietors will have received their licenses by the time this issue of the "American Grain Trade" reaches our readers or will get them very soon. To be sure, we may as well break the news that yet other extensions of the licensing system are in contemplation that will extend its scope to the small operators who have been exempt up to this time, but even with that the prospect is that the grain trade will henceforth fit into the new order of things with little friction.

For all that some of the elevator men feel that Uncle Sam has rather tried their patience in launching his new licensing system it must be confessed that there is another side to the story. It has been a pretty big enterprise to get in motion quickly from a dead start. Last August, when the first phase of the elevator licensing scheme took shape, just 10 days were allowed to create "from nothing," as one official puts it, a full fledged Licensing Division of the U. S. Food Administration. Perhaps it is not to be wondered at that there were hitches and halts at the go-off.

Now, after three months of gingering up laggards and untying of tangles, there are still coming into headquarters a few straggling applications for licenses under the President's first proclamation. That is to say the new rush of applicants for licenses under the new orders from the national capital overtakes the rear guard of the elevator men who were supposed to respond to the first summons. However, a peep into the Pope Building on Fourteenth Street in Washington where hundreds of newly-recruited Federal employes are working overtime to handle this new responsibility inspires a certain amount of confidence that everything will now come out all right, or as nearly right as things can come out, considering the scope and magnitude of the operations.

The licensing officials now frankly admit that at the outset they made one serious mistake in overestimating the ease with which many an elevator man would grasp all the details of what is in reality a fairly complicated licensing system. After the fashion of men who have complete knowledge of a subject at their finger tips these officials took too much for granted with respect to the other fellow and did not allow for the fact that the other fellow, deeply engrossed in his own business affairs, has probably not kept tab on every new kink of Governmental routine or at least that he hasn't somebody at his elbow of whom to ask questions when any point puzzles him. Thus the meagerness of instructions sent to elevator men in the beginning and the correspondence that has been necessary to clear up clouded points has been in great measure responsible for whatever delays have occurred in the issuance of licenses for the storage of wheat and rye.

It was because of the confusion and misunderstanding in the earlier stages of the licensing program that the officials determined to speak in words of one syllable when it came to extending the scope of the licensing system to the additional grains, etc., encompassed within the President's second proclamation, that dated October 8, 1917. Accordingly, in this latter case there are being sent out with the application blanks, circular letters—"primers" they might almost be called—that are designed to forestall any question an elevator

man might ask with respect to this new project.

Supplementing the very complete letter of instructions from the Law Department of the License Division of the Food Administration there goes to every elevator man who is called upon to apply for a license a sort of guide or manual entitled, "Rules and Regulations Governing the Importation, Manufacture, Storage and Distribution of Food Commodities for Domestic Trade By Persons Subject to License." Indeed, it was because the overworked U. S. Government Printing Office was behindhand in the delivery of these pamphlets that the issuance of licenses under the latest proclamation was delayed beyond November 1, the date set, and authority had to be given to elevator men to operate without waiting to receive their licenses. However, the 15 rules and regulations specially applicable to grain elevators, grain dealers and grain millers are accounted of such vital importance that it was deemed best to have them in the hands of the men in the trade as soon as they received their licenses.

No claim is made by the officials of the Food Administration that the licensing system which has been devised is absolutely ideal nor that it may not involve some elevator men in seemingly needless bother. For example to the busy elevator man it may appear rather too much of a good thing that after having taken out a license to handle wheat and rye he should now be bothered to likewise obtain authority for corn and oats. However, the officials tell the "American Grain Trade" that they have been unable, in view of the revision of the licensing system by the President's later proclamation, to devise a working arrangement that does not involve a little lost motion or duplication of effort at the outset for the grain man that handles other grains as well as wheat and rye.

However, the officials hope that grain men who have their worries with Uncle Sam's new regulatory system will take effort by contrasting their status with that of their brethren in the Old World, where, particularly in Germany and Great Britain, grain men are called upon to take out not merely one license but maybe a dozen different licenses and where there is no such a thing as a blanket license but where separate and specific authorization must be obtained for each individual transaction.

In other words, the attitude of American officialdom is that the American grain trade is very fortunate in being confronted by a licensing system that is planned on distinctive original lines and that has the merit that it permits a firm to operate under one license no matter how many different commodities are handled and no matter how many different branches the concern has or where they are located so long as they are operated under one name.

It is just this desire to simplify matters as much as possible for the grain man that is responsible for the form of application for license that has been adopted latterly by the Food Administration's licensing annex. It is a formidable looking sheet, the blank that the grain man has received who comes under the terms of the President's latest proclamation, but when he examines it he observes that he is only called upon to fill out a portion of the blank spaces and that the arrangement is such that whatever the scope of his operations this application will take care of him. At one swoop he can be licensed as any or all of the following: "elevator operator," "manufacturer," "wholesaler or jobber," "commission merchant," "broker," "auction firm" and "retailer."

There appears to be no way, and maybe will not

be for some time to come, to estimate how many additional elevators, etc., have been brought within the scope of the licensing system under its recent expansion which takes barley, oats, corn, rice, peas, beans and their products. Under the original plan which concerned itself merely with wheat and rye some 20,000 licenses were issued. The presumption has been, at Washington, that the great proportion of elevators will include wheat and rye in their operations and that consequently the round-up made under the licenses that became effective September 1 should be pretty complete. At the same time it is realized that there are certain establishments that handle only corn, oats, etc., being located in districts given over almost exclusively to the cultivation of such products. The difficulty in calculating, at this time, the number of additions to the list of grain licenses arises from the circumstance that in the new deal the grain men are lumped with storers and handlers of milk, butter, sugar, canned goods and other food products. Therefore to say that under the new project more than 40,000 applications have been received and 18,000 licenses have been prepared really conveys no intimation of the number of grain men that have responded to this second call.

It may be safely said that by the end of the year the situation should be cleaned up and matters running smoothly. As a matter of fact, grain men need no prod to get in line under the licensing arrangement because it is pretty well realized that operators in the trade whose applications have not been promptly filed at Washington are very liable to find themselves in serious trading difficulties. One of the regulations under which the grain business must henceforth be conducted requires that a licensee shall place in every contract, order, acceptance of order, invoice, price-list and quotation the number of his Food Administration License. Likewise are buying operations as well as selling operations prohibited in the case of any person required to have a license who has not secured such license.

Another reason for getting in line promptly with all license paraphernalia is that on December 1 every grain man will be expected to transmit his first report under the new arrangement. As our readers doubtless appreciate, one of the objects or purposes of the licensing system is to enable Uncle Sam to keep tab on stocks of grain and grain movements by means of periodic reports. It has not been determined at this writing just what information will be asked for, beyond data as to the amount of stock on hand at the beginning of the month in which the report is submitted, but the fact that December 1 has been set for the transmission of the initial report to the Law Department, License Section, U. S. Food Administration, Washington, D. C., will inspire most grain men with a desire to have all preliminaries out of the way by that time.

As has been said there are now 15 rules and regulations to govern the business conduct of grain elevators and grain dealers under Governmental license. The first six rules of the series are those with respect to the storage of wheat and rye which were approved by Herbert Hoover under date of August 15 and which went into effect September 1. To this initial set of rules of thumb there have now been added nine others. Yet other rules will be promulgated from time to time as occasion may require and copies will be promptly transmitted to each grain man on the Food Administration's mailing list.

Of the new rules which become effective with November, No. 7 prohibits any licensee manufacturing wheat or rye flour from making any contract that does not call for shipment or delivery within 30 days. No. 8 prohibits any flour delivery that will give a person a supply in excess of his reasonable requirements. Rule No. 9 requires a signed contract of stipulated form for every transaction involving wheat or rye flour in quantities of 25 barrels or more. Rule No. 10 calls for package differentials, to be hereafter determined for all wheat flour. The next rule is designed to prevent the sale of any grain or grain products at

more than "a reasonable advance over actual purchase price without regard to the market or replacement value." Rule 12 applies the same principle to flour, while Rule 13 fixes the maximum profit of 25 cents per barrel on flour and 50 cents per ton on feed. The purpose of Rule 14 is to tell the miller how he may segregate his retailing and jobbing business or include it as a part of the regular milling operation and, finally, Rule 15 strikes at the purchase and sale of wheat on a margin of profit greater than charge by other dealers in the same locality.

As the scope of the rules and regulations governing the licensed grain trade grows, more and more authority will be vested in the Zone Agents of the United States Food Administration Grain Corporation. As our readers know, it was decided early in October that for the sake of convenience and the expedition of reports the United States should be divided into 14 zones under the grain control of the Food Administration Act. A Government Agent in the central city of each zone has control of the grain for that zone. These Zone Agents are supposed to be practical grain men, each thoroughly conversant with trade conditions in his territory and the disposition at Washington is to leave more and more to the discretion of these field marshals of the organization. The trade has already seen how they have, in the case of spring wheat and rye, desired for seed purposes, waived the rule against the storage of wheat and rye for periods in excess of 30 days, and they will be empowered to grant similar leeway with respect to other rules and regulations when conditions warrant.

While the licensing machinery in Washington has been set in motion without much friction there have been not a few manifestations of feeling between elevator men and track buyers. Elevator men, contrasting the invested capital represented by their plants and their consequent liability to all sorts of Federal taxes, including the new war taxes, have urged that no licenses be granted to the track buyers who can show no such investment. The question of what policy should be pursued was the subject of prolonged conferences between the officials of the Law Department, License Division and the executives of the Grain Corporation, but in the end it was decided that track buyers and other similar factors in the trade are entitled to their credentials.

On the other hand it has been decided that co-operative elevators which handle grain belonging to anyone not a member of the company must also take out a license.

Mention was made at the outset of this article of a contemplated extension of the scope of the licensing system that would bring in the last element in the trade, namely the small millers, and the fact that this move is in prospect is in reality the big news of the hour for the trade. The project will probably take the form of a Presidential proclamation that will knock out the exemption now enjoyed by millers operating plants of a daily capacity of less than 75 barrels. The officials regret now that an exception was made in the case of the small millers and they are anxious that Mr. Hoover recommend to the President that they be brought into the family of licensees.

The change of sentiment in official Washington arises from a realization that whereas a daily milled output of 75 barrels or less is too small to worry the officials, it not infrequently happens that a small capacity mill has back of it elevator or storage capacity disproportionate to the daily mill operations. In any event, even if the mill output is to be disregarded, the Food Administration would like to know how much wheat is in storage by the small millers. They can get at it by requiring, as they now do, that the small miller shall report on his elevator operations even though he is not called upon to take Uncle Sam into his confidence regarding his milling activities. However, it is found that this double standard is not satisfactory, many small millers failing to comprehend why they should report on their grain storage, etc., when the rules plainly exempt mills such as theirs. In order, therefore, to get around the difficulty and end

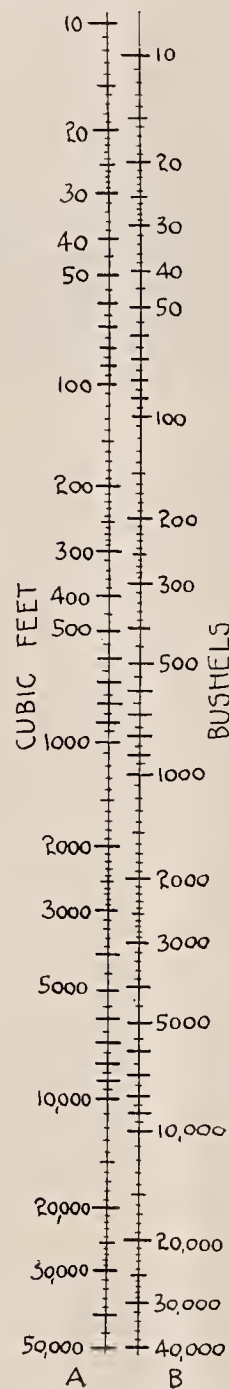
the confusion that now prevails in the milling trade it is felt that the simplest plan will be to strike out entirely the privilege heretofore accorded small millers and require reports from all who store any grain or conduct wholesale operations of any kind.

BUSHEL OF GRAIN IN ANY NUMBER OF CUBIC FEET

BY N. G. NEAR.

Inasmuch as it is frequently desirable to convert a given number of cubic feet into bushels, which is virtually what is done when one computes the capacity of any bin, a conversion scale of this kind will be found quite handy by grain men.

All that is necessary in the application of this scale is to glance from the number of cubic feet in



column A to column B and there's the answer—in bushels.

Similar to the chart shown in the August number of the "American Grain Trade" this one is based on 1.243 cubic feet per bushel.

For example: How many bushels will a bin hold whose dimensions are 10 feet wide by 10 feet long by 20 feet deep?

The volume in cubic feet of this bin is, of course:
 $10 \times 10 \times 20 = 2000$ cubic feet.

Find the 2000 in column A and right across is the answer—approximately 1,600 bushels.

This chart has the advantage that it is applicable to a bin of any form—rectangular, square, round, elliptical, or it may be applied to irregular or conical piles. The range of the chart, it will be noted, is great enough to care for all ordinary bins from 10 to 50,000 cubic feet. However, if it should be desired to find the number of bushels in larger bins the same chart may be used by merely moving the decimal point one or more places to the right. For example, in 200,000 cubic feet there are 160,000 bushels. See how it is done?

ARBITRATION DECISIONS

The first decision on dockage freight was decided by Arbitration Committee No. 2 of the Grain Dealers National Association in the case of the Northern Grain & Warehouse Company of Portland, Ore., vs. Barkemeyer Grain & Seed Company of Great Falls, Mont. The sale was for 20,000 bushels No. 2 white club wheat at \$1.17, on basis of 50 cents rate points to Chicago, destination weight and grade, terminal market rules to govern. Two points were involved in the controversy.

The first point concerned the matter of commission for diversion of the wheat to Minneapolis. The plaintiffs objected to this commission, but as it is according to the rules of the St. Louis market, the committee overruled the objection.

The second objection the plaintiffs made was against the freight charge on dockage at Minneapolis. But the committee ruled as follows:

The plaintiffs contend that as this sale was made f. o. b. shipping point, they were not concerned in the freight on dockage, that they only expected and did only receive pay for the net amount of wheat (i. e., the number of bushels of wheat after the dockage was deducted), and that in a sale made f. o. b. shippers' station, the buyer should pay the freight on the dockage, and they introduce several letters from different Pacific Northwestern dealers to bear out their contention that such is the rule and practice in that locality.

The defendants cite the rules of the Minneapolis Chamber of Commerce bearing on the subject of dockage, as follows:

Rule VIII, Sec. 10.—"Offers of purchases shall be made subject to the usual and the same charges of this association to include and they shall include switching, inspection, weighing, freight—if a delivered bid and freight on dockage if a track bid—interest on advances, and all other charges according to the rules of this association the same as if said grain or seeds were handled on commission through said association"; also, accounts sales from various firms and letters from others showing this to be the custom in the Northwestern markets.

This matter has given the committee a great deal of concern from the fact that our Association Trade Rules are silent on this point and that the Central and Eastern markets have not had any experience in the matter of dockage until after the promulgation of the Federal grades of wheat which became effective July 1, 1917.

As a general proposition it would seem that the shipper of wheat that contained a certain per cent of dockage should be entitled to remuneration for the value of the dockage, if there be any value to it, and that in a sale of wheat, f. o. b. shippers' station, it would not be fair to take a sometimes valuable ingredient, determined dockage, and allow the shipper nothing for it and also to charge the shipper an added penalty of freight on same to destination.

Your committee finds that there is a sentiment among some of the specialists in the Grain Standardization Department of the Department of Agriculture that the shipper should be allowed the value of all of his commodity, whether it be contract grain or dockage, and they have found that in many sections this is now being done in several different ways.

It is a fact as ascertained by the agents of the Department of Agriculture in their exhaustive data gathered in all parts of the United States that wheat is handled in the Northwestern markets at a much less margin or profit than elsewhere in the United States, and that this is largely a result of the practice of taking the dockage without remuneration to the shipper that has been practiced in those markets for several years.

Hence, in view of the experience of the Government agents and from the fact that the confirmation of purchase of defendants stated, "this contract subject to the rules, regulations, and customs of terminal markets," which confirmation was not objected to by plaintiffs, as provided for in Trade Rule No. 4, Sec. (A), and from the further fact that the rules of the Minneapolis market require its members to charge back to shippers freight on dockage, even on sales made f. o. b. shipping points, our decision is in favor of the defendants and we order the costs of arbitration to be paid by the plaintiffs.

* * *

Arbitration Committee No. 2 also decided the case of the Early & Daniel Company of Cincinnati vs. Charles Shelby of Paxton, Ill.

This case involves the question as to when the buyer of grain shall exercise his option to buy in a quantity of grain bought when the seller fails to ship within the contract time.

The evidence shows that on Jan. 15, 1917, the plaintiffs purchased of the defendant, through A. D. Rockwell, a broker, 3,000 bushels of No. 3 or better corn.

On account of an embargo at Cincinnati, the Early & Daniel Company wired Charles Shelby to withhold shipments until further notice, and on

February 5 at 8:44 a. m. Shelby wired to have order cancelled. At 11:00 a. m. of the same day the Early & Daniel Company replied that they couldn't cancel and subsequently bought in the grain. The committee reported its decision as follows:

Defendant lays much stress upon the fact that he wired plaintiffs early on the morning of Feb. 5, 1917, to cancel and that plaintiffs should have done so before the opening of the market on that date and not waited until eleven o'clock, as shown by message received by him, when the market had advanced over 1c, and, for this reason, denies liability entirely, as he considered the trade cancelled and made other disposition of his corn.

The plaintiffs' contentions are that they never cancelled the contract at any time, that their first wire was simply a request to hold the shipments until conditions in their market got better when handling could be better facilitated, and that they were within their

rights in extending the time in their efforts to get defendant to ship the corn and fill the sale, and they ask the award as shown in their memo to defendant.

The committee finds that the defendant could not properly insist on a cancellation of the contract under the circumstances and his liability must continue until the full expiration of the contract, unless agreed to by the plaintiffs, which, in this case, was not done; also, that the plaintiffs therein could not extend the time of shipment in the contract beyond the full expiration time of the contract without the consent of the defendant but must avail themselves of one or the other of the options given a purchaser in the trade rules of the Grain Dealers National Association, of either cancelling the contract outright or buying in the grain for the account of the seller.

Therefore, we would find and order that the defendant pay to the plaintiffs the sum of two hundred four and fifteen hundredths dollars (\$204.15) and that the costs of arbitration be equally divided.

Protecting the Elevator

The Hazards of Elevator Operation and the Way to Overcome Them—A Comprehensive Survey of the Ways and Means of Conserving Our Grain Supplies in Storage

A GREAT many suggestions for protecting the elevator have been given from time to time since the need of conserving our grain supply became so urgent, but no review of the subject has been so comprehensive and valuable as that recently put out by the National Board of Fire Underwriters for the United States Food Administration. This outline should be carefully studied by the operator of every plant, large and small, and the suggestions followed in every possible particular. The review follows:

In all grain elevators there is a high inherent fire hazard due to the dust and dirt and the heavy and powerful machinery. Fires from this cause a loss of many million bushels of grain annually under normal conditions of operating in peace times.

The average elevator owner and his superintendent know what the dangers are, but in many properties there is evident disregard or lack of concern due to various causes such as penurious methods, antiquated arrangements which make a house costly to operate and dangerous to health of employees, too much speed, too much pressure on the superintendent for a low handling cost per bushel, etc.

These inherent hazards are controlled in well managed plants. It is largely a question of the employment of sufficient competent help to watch the house while running, the provision of simple, inexpensive, automatic devices, such as suction fans, dust collectors and ventilating systems, and the maintenance of equipment in proper order.

Our experience shows the chance of fires in clean, well regulated houses is only about one-seventh as great as in the poorly regulated properties.

GENERAL RULES

The following general rules should be enforced in all elevators of a combustible character, regardless of the supposed efficiency of the fire protection available:

A. The yard about the house shall be kept raked up and clear of refuse, dry grass, broken lumber and combustible trash. Grain door lumber shall be piled outside at a safe distance from the house. These precautions are necessary to avoid the hazard of sparks from locomotives, grass fires, etc.

Open spaces under buildings or under platforms must be boarded up or otherwise closed to prevent accumulation of rubbish and to keep out intruders. Car sheds must be kept clean.

All windows, ventilators or fan discharge openings on exposed, railroad or boat side of building or additions must be protected by spark screens of heavy, galvanized wire and all windows properly glazed. All basement windows must be screened.

Floor openings add materially to the possibility of a rapid spread of fire and should be carefully safeguarded and protected where such openings exist or are necessary.

B. The interior of the house shall be kept orderly; excessive storage of empty bags or of sacked screenings or stock inside the elevator is undesirable.

All old idle machinery, belts, rope, buckets, un-

used spouting, parts of apparatus or equipment must be removed from the building; temporary storage only of new repair parts and pieces may be permitted. (The presence of such material is a general excuse for accumulation of dirt and a cause of superficial attention to cleanliness.)

COMMON HAZARDS

C. As to the installation of lights, heating apparatus, boilers, engines, electric motors and mechanical equipment, when correctly planned and properly arranged there is usually not much to criticize, but the misuse of poor maintenance of such equipment quickly becomes dangerous.

The use or presence of open lights, of fires, of matches, smoking or any kindred danger must be prohibited within the elevator building, or on the premises at any point where a fire originating from such danger may imperil the property. When no detached office or outbuilding is available, however, a grain moisture tester of the type adopted by the U. S. Government, when properly installed, may be used in the superintendent's office in the receiving (grade) floor, but on no account above or below the receiving floor.

The use of portable lights shall be strictly controlled; all oils shall be handled and lanterns filled in some safe room outside of the main house. Electric portable lamps shall be permitted only when equipped with approved armored or special reinforced flexible cord, vapor proof globes and heavy wire guards. All electrical equipment shall conform to the established National Electrical Code. Vapor proof globes shall be required for fixed lights at dusty locations; all others must be kept wiped off and away from combustible material. All electric motors should be of the enclosed type and must be kept clean.

Carpenter shops, carpenters' tool chests, blacksmith shops and similar repair departments must be provided for in outbuildings remote from the elevator or warehouse building.

Employees' rest rooms, wooden lockers and weighmasters' offices are fruitful sources of fire; all clothing should be kept in metal lockers; overalls, jackets and greasy clothing, not in use, should not be allowed to accumulate in lockers. Standard waste cans should be supplied and used throughout the house.

OPERATING HAZARDS

D. It should be required that men responsible for the operation of the apparatus be on duty both upstairs and downstairs while the apparatus is in operation.

Each time that the machinery is started up it shall be the duty of some one competent man to examine all elevators and machines, in order to make sure that those connected are running. Whenever the plant is closed down for the day, some competent man shall be delegated to examine all bearings in order to make sure that they are safe.

E. The greatest danger is from chokes in the elevators and screw conveyors. Fires start from friction of the pulleys against belts which are stuck,

or from slipping of clutches, or from grinding of conveyor blades against a choke in a tightly covered trough. Protection against this hazard is largely a question of watchfulness. The following precautions should be observed:

All grain entering elevator building should be obliged to pass through a properly constructed grating. All grain-carrying elevators should be fed on front, or up side, of leg. The elevator head should be equipped with automatic relief in discharge spout to prevent grain falling down back leg when bin is full or spout is choked from other cause. Screw conveyor box should have loose top at discharge end, in addition to an automatic (spring door) relief valve at side of conveyor box at discharge end.

F. All side rubbing of belts, rope drives and pulleys should be corrected by cutting away wood-work or by rearranging belts and ropes that rub. This hazard must be overcome or fire will result.

G. Special oilers, having no other duty, should be provided, and they should be required to keep all bearings and supports free from gum, greasy dirt, or other accumulation, other than the day's accumulation of dry dust. When bearings are not accessible while running, they should be made so. The oiler should have a separate eating time, and be free to work during noon shut-down.

All lubricating inlets should be kept clean, so that the lubricants will reach the bearing surfaces without obstruction by dirt, and bearings should be provided with dust caps.

In general the best method of lubrication in grain elevators is a good grade of hard oil grease. A good grade of engine oil is permissible. Of course, oil must be used on self-oiling bearings.

Anything approaching the slopping-on of lubricants must be forbidden, and troublesome bearings must be overhauled for re-alignment, rebabbiting or replacement with larger bearings if the load is too heavy. Water cooling is not to be tolerated.

Whenever a bearing is found to be in a dangerous condition beyond the power of the oiler to control, and the machine or shaft cannot be disconnected, the house should be shut down, notwithstanding the urgency of any other demands.

H. Sufficient help must be employed at all times to clear the house daily of the dust and refuse of operation; each spill of grain must be cleared as soon as the transfer causing it is completed. Screenings must be kept shoveled up and sacked. Pits about elevator boots must be kept clear of spilled grain and of dust and dirt. Basements must be kept clear of floor accumulations, and, in general, there is no reason for permitting floor accumulations exceeding one day's standing in any portion of an elevator, nor exceeding an hour or two's standing in any portion where active accumulation is going on (about machines or at spout discharges).

All holes, crevices, breaks and other openings in elevator legs, garners, scales and spouting, permitting unnecessary escape of dust or grain, must be repaired or covered, and where permitted by warehouse regulations, a dust suction system, drawing from elevator heads, garners and scales and exhausting to dust collectors, should be used.

All grain dust from fans on cleaning machines should be discharged to boiler furnace, or to outside dust houses at a safe distance from the building, or to a system of dust collectors, preferably non-combustible; all such systems should be equipped with the usual dampers against back drafts.

I. All bleachers and driers must be safely away from the house and connected only by incombustible spouting and conveyors.

Bleachers are less dangerous where there is abundant provision for cooling the gas from the sulphur furnace, but wherever hot gas is used there is danger from sparks in the grain discharged to the house. This is particularly true where there is wooden shelving or cribbing in the bleaching tower, even though it may be limited to the upper portion of the structure. The use of steam blast with the hot gas does not prevent this in such cases.

All fire heated driers are open to suspicion. Steam coil driers, where the grain comes in contact with steam coils, are not permissible. A rule

should be made to turn steam off drier coils when drying fan stops. Even when well designed, however, driers should not be permitted inside elevator buildings.

FIRE PROTECTION

J. Where properly installed and maintained, automatic sprinklers have rendered valuable fire service and their installation is worthy of serious consideration.

All elevators should have a complete equipment of water barrels and pails. To prevent freezing, calcium chloride should be used in the following ratio: 3½ pounds, per gallon, for 10° below; 4 pounds per gallon, for 18° below; or 5 pounds per gallon, for 40° below.

Barrels for a calcium brine must be tarred or paraffined inside and greased around the top, to keep salts from creeping. Close fitting covers must be provided for all barrels. Calcium brine does not evaporate or sour. There should be barrels at all stairways and approximately one to every 1,500 square feet of floor space, with two or three buckets of approved type at each barrel.

Next after barrels and pails as to availability, comes 1½-inch hose. If heavier hose is used, nozzle outlet should not exceed ¾ or ½-inch opening. Some system of signalling the engine room should be at hand near every hose line.

Fire axes must be conveniently placed on all floors to use in cutting into spouting and other concealed spaces.

SUPERVISION AND SELF-INSPECTION

Supervision. The maintenance on duty at all times of military, or other armed outside guards is believed to be essential. The following features should also be provided:

Barbed wire fences or other suitable man-tight enclosures, where practicable, enclosing all items to be protected;

Flood lights so arranged and maintained as to light the enclosed area and/or immediate water front;

A system of identification of all persons entering premises.

Guards. The disposition of military guards should be under the direct control of the Federal or state military authorities, to the end that sufficient protection be afforded in accordance with uniform regulations. The military guard should be augmented by gate tenders in the elevator company's employ at each point of ingress to elevator premises. Gate tenders should be appointed only after a thorough investigation to ascertain their efficiency and loyalty to the Government. They should be capable of identifying regular employees and should co-operate in the work of the military guards.

Barbed Wire Fences. These are of immense value in protecting property. They designate "dead lines," retard approach to the plant, and clearly define territory guarded. It is suggested that these fences be at least 7 feet in height, with an outside flare or overhang at top of 2 feet, that posts be not more than 10 feet apart, and that the barbed wire strands run longitudinally with the fence and not more than 6 inches apart, with two interwoven vertical wires equidistant between the posts. No more gates than are absolutely essential should be employed, and the spiling of the docks, when open, also should be equipped with barbed wire in such a manner as to make space beneath docks inaccessible to small boats.

Lights. Efficient lighting should be provided nightly for the area under guard.

Identification System. No passes shall be issued except to persons having legitimate reasons for visiting the elevator premises. No persons not in the direct employ of an elevator company should be admitted within the elevator premises without a pass. Such pass should be in the form of an identification card, which should set forth the characteristics of the person to whom it is issued and which should be obtained only upon personal application at the main office of the concern in the city or town where property is located. Pass should be signed by an official of the concern issuing same and by the applicant in the presence of said official. Bearer of pass should be required to exhibit same upon request at any time while on elevator premises, and

should be required to sign and surrender pass when leaving.

In all cases inspectors as well as visitors should be accompanied through the premises by a trusted employee. Such safeguard should be introduced to guard against carelessness on the part of the inspector or visitor. If this plan were followed it would be difficult for an impostor to harm the property. Should the conductor be a guard or a gate keeper, the post he vacates should be immediately filled by some other trusted employee, in order that strangers, not entitled to enter, may be refused admittance.

Some trusted employee should ascertain the names of all men in the unloading crews, more commonly known as "grain levelers"; he should keep a sharp lookout on their actions while at work, and should ascertain from his list, taken when they are placed at work, that all have left the premises when the unloading is completed.

The foregoing should not apply to agents of the Federal Government, to insurance inspectors working in conjunction with the Federal authorities, or to employees of railroad or transportation companies for whom properly authenticated photographic passes for continuous use may be provided.

Co-operation. A system of co-operation should be worked out with railroads for safeguarding grain in transit against the placing of bombs. Under no circumstances should cars, whose seals were found broken when arriving at terminal points, be delivered to elevator premises until a thorough examination of contents has been made.

Self-Inspection. In order that owners and managers may be accurately informed at all times as to the protection of their elevators, it is essential that responsibility for reporting on conditions be assigned to a single individual in each house. Signed reports should be filed with the principal office of the elevator company at least once per week on a satisfactory blank.

The following is a form that is recommended:

ELEVATOR INSPECTION REPORT

Cleanliness and Order

1. Does the elevator receive a thorough sweeping every day?
2. Is the accumulation of dirt removed from all beams, braces, steam pipes, benches and corners every day?
3. Is the floor sweeping and fan system in perfect working order? If not, state particulars
4. Are the waste cans properly used and emptied daily?
5. If there has been repair work, has all of the refuse been removed?
6. Are the outside premises within fifty feet from all buildings kept entirely clear from litter and rubbish?
7. Has the litter from the cooerage of grain cars been prevented from accumulating within one hundred feet of our buildings?
8. Are the railroad employees maintaining the required cleanliness of the right-of-way adjacent to our property?

Condition of Machinery

9. Has there been any heating of bearings? If so, state location, cause and correction.
10. Have there been any blow-outs of electric fuses, or other electrical troubles? If so, state particulars.
11. Have you made sure by personal examination that the elevator head and boot pulleys are running true and that all belts and pulleys are free from excessive friction?
12. Have there been any chokeups? If so, give cause
13. Have any fires developed in the dryer steam coil room? If so, give cause

Obedience to Rules

14. Are the employees carefully following your instructions as to proper lubrication?
15. Are the rules as to smoking and the disposal of matches being followed?
16. Has there been any case of wrapping or hanging electric lamp cords upon nails, upon pipes or in other dangerous places? If so, give particulars.
17. Have oat clippings been burned? If so, state reason and place of burning
18. Are you certain that the switch engine has not violated rules by entering the track shed, or by pulling fires within one hundred feet of our buildings? If there have been violations, give particulars.
19. Has the watchman performed his duties and made full watch reports?
20. Has any person been admitted to the premises without authority from the manager? If so, give particulars

Fire Protection

21. Is every water barrel kept at least three-fourths filled?
22. Are there two fire pails at each barrel?
23. Has every chemical extinguisher been recharged within six months?
24. Is there a sufficient quantity of good fire hose to reach every part of each floor, coupled to stand pipes and having nozzles attached?
25. What is the date of the last testing of the fire hose?
26. Are the hose spanner, fireman's ax and all the other fire-fighting apparatus in the proper order and place?
27. Are the fire doors in the proper working condition?
28. Are the alarms to the sprinkler equipment in proper working order?
29. Is the controlling valve to the sprinklers open?
30. Have any sprinkler heads corroded, or have any been painted or whitewashed? If so, state particulars.
31. Are there any obstructions to the distribution of water from the sprinkler within twenty-four inches from the ceilings? If so, state particulars.
32. Are there any partitions except where midway between sprinkler heads? If so, state particulars.
33. Have any tables or decks been installed in excess of 4 feet in width? If so, state particulars.
34. Is it advisable to have an insurance, mechanical, electrical or sprinkler expert advise you upon any particulars?

General Remarks

Made for the week ending 1917

I certify that the foregoing answers are correct to the best of my knowledge and belief

Fireman

Watchmen. A watchman with approved recording system, having a sufficient number of stations to compel visits to all parts of building and, where necessary, of yard, should be maintained. Watchman should be on duty at all times when plant is not in operation and should make hourly rounds.

Watchman's rounds should be made in a leisurely manner to enable the watchman to discover fire or evidence of danger. He should be carefully instructed regarding location of fire alarm boxes, use of water buckets and fire extinguishers, and means of calling for help; he should be instructed by the superintendent about the chief danger spots.

Fire Brigades. Regular employees should be thoroughly drilled in the use of private fire fighting facilities. The pamphlet, containing suggestions of the National Board of Fire Underwriters for the organization and drilling of private fire brigades, is made a part of this report.

NEW PLANT FROM ASHES OF OLD

The uncertainties of the grain trade in these troubled times had no terrors for the Palmer-Miller Grain Company of Celina, Ohio, for when their plant burned to the ground on the 27th of last March, they lost not a minute in erecting a new house, superior in construction and equipment to the old.

The loss had been a severe one, for beside the elevator, 6,000 bushels of wheat, 6,500 bushels of corn, 7,000 bushels of oats, 100 bushels of clover



PLANT OF PALMER-MILLER GRAIN COMPANY, CELINA, OHIO

seed, two cars of flour, two cars of mill feed and one car of bran were lost in the flames, representing a value of over \$40,000.

The new house is of iron-clad crib construction, of 45,000 bushels capacity of grain and 15 cars in the feed storage room. Under this feed room is a full height basement. The machinery is operated by individual motors and the equipment is all of standard make and complete for the proper handling and care of all varieties of grain. Connected with the house is a large Randolph Drier, which is not shown in the picture.

W. T. Palmer and Perry Miller are the members of the firm and in describing the construction of the new elevator, they say:

"We purchased all of our own material and hired all our own labor. It took us a little over four weeks to clear up the debris from the fire on the location, and in just 70 days after we started the excavation we took out our first load of grain.

"The house, however, was not quite completed, but we feel we certainly made some record in construction, considering the disadvantage in getting material in and the trouble of getting orders accepted and filled. The property is modern in every respect, and we feel it is one of the best constructed elevators in Ohio and Indiana."

The various items in the list of losses and the extensive use of display advertising on the plant show the numerous activities in which the firm is engaged. It is probable that the advertising has been a large factor in the success of the plant.

The Handling and Storage of Spring Wheat

BY C. H. BAILEY*

Professor of Cereal Technology, University of Minnesota

THE greater part of the small-grain crop of commerce grown in the Great Plains area and the eastern part of the United States is handled in bulk. Certain factors involved in the successful handling and storage of grain vary, depending upon whether it is handled in bulk or in sacks. In the first place, there is less opportunity for change in the moisture content of bulk grain. Slight reductions in moisture content may result when relatively damp grain is handled on a hot day, while a slight increase may occur when very cold grain is exposed in a warm, humid atmosphere. In general, however, the moisture content of spring wheat is determined principally by the climatic conditions prevailing between harvesting and threshing. If this period is warm and dry the grain will be well cured when it starts on its jour-

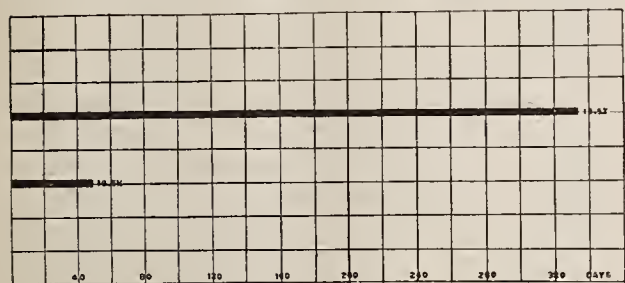


FIG. 1.—GRAPHIC DIAGRAM SHOWING RELATION BETWEEN MOISTURE CONTENT AND RATE OF HEATING

ney to the consumer; rain on the unthreshed bundles, particularly if exposed in the shock, results in damp, "tough" wheat that will cause difficulties in handling and storing.

The fact that wheat is a relatively poor conductor of heat introduces another variable in handling wheat in bulk as compared with handling in sacks. The heat which develops when damp wheat is stored does not pass off as rapidly from a large bulk as from a smaller one, such as exists when sacks are piled in narrow stacks. The more rapid the transfer of heat from a fermenting mass to a cooler surrounding medium (usually air) the less the likelihood of serious damage. This is assuming that the moisture content of the grain is sufficiently low to preclude germination.

Spring wheat is not biologically ripe at the time it is usually harvested. The post-harvesting process of ripening is attended by certain peculiar phenomena. If the bundles are in a stack they take on a moist condition. This process is commonly called "sweating," and is undoubtedly accompanied by biochemical changes resulting from enzymic activities within the kernel. If the sweating process occurs in normal wheat in the bin, a slight rise in temperature may result. The baking quality of the flour is improved by these changes in the grain.

There are several factors which determine whether or not grain will spoil in storage after it has passed through the sweat. First, and most important, is the percentage of moisture in the kernels when they are stored. The form in which moisture exists in the kernel is of interest in this connection. Organic colloids of the nature of those which form the principal constituents of the wheat kernel have the property of imbibing considerable quantities of water and forming elastic gels. The colloidal gel swells considerably, although the total volume of the water plus the dry colloid diminishes. The water-imbibing capacity of the several colloids varies widely. Thus starch has only about one-fourth the imbibing capacity of wheat gluten. There is no fixed amount which a given dry colloid will imbibe; thus gels of varying viscosity can be produced, depending upon the proportion of water present and upon other variables, such as temperature, mineral salts, and other substances. The rate of diffusion in a gel varies with the vis-

cosity; in dilute gels diffusion takes place as in water, while in strong gels the rate is slower. It is probable that in dry grain the imbibed water is not sufficient to produce a gel, i. e., the colloidal material does not have a continuous structure. The possibilities of diffusion are decidedly reduced under such conditions.

The exact percentage of moisture below which this discontinuous structure exists is not known; it probably varies with the percentage of gluten in the grain, since gluten possesses a greater water-imbibing capacity than starch. Increasing the moisture content above the maximum at which discontinuity exists results in the formation of an elastic gel through which diffusion can occur. Further increases in moisture content up to saturation (maximum imbibition) produce progressively less viscous gels, and correspondingly increase the rate of diffusion. Since the rate of respiration in grain doubtless depends in part upon the rate of diffusion between the various kernel structures, it follows that the less viscous the gelatinous material of which the cell contents are composed the more rapid the production of heat through respiration. To restate, the production of heat is dependent upon the activity of the oxidases of the kernel, the complex phenomena being known as respiration. The latter is accelerated by an increase in the rate of diffusion, which in turn is dependent upon the existence of a gel, and the viscosity of that gel.

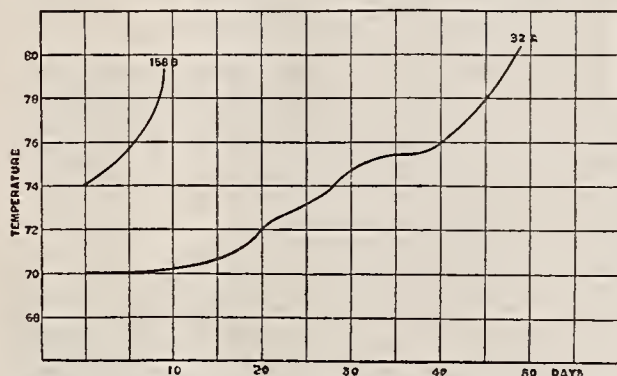


FIG. 2.—THE RELATION OF THE ORIGINAL TEMPERATURE OF SPRING WHEAT TO THE RATE OF HEATING

For these reasons the moisture content of the grain determines to a considerable extent the liability of heating when bulk grain is stored, and also the rate at which the respiration and consequent heating will occur.

To ascertain the percentage of moisture which spring wheat may contain without heating in store, the Minnesota Grain Inspection Department and the State Boards of Grain Appeals, in co-operation with the Division of Agricultural Chemistry of the University of Minnesota, obtained permission from one of the large elevator companies of the State to make observations in grain stored by them. About 20 lots of wheat were experimented with, containing from 12.76 to 17.45 per cent of moisture. No lot represented less than a carload (1,200 to 1,400 bushels.) These observations were made through a period of more than one year, covering two summer seasons and the intervening winter. The data are too voluminous to be given in detail in this paper. It was concluded that hard spring wheat of reasonable plumpness, containing less than 14.5 per cent of moisture, is not likely to heat when stored under normal conditions in a temperate climate, while similar wheat containing 15.5 per cent or over of moisture is practically certain to heat. Between these limits the possibility of heating depends upon other conditions which are discussed later in this paper.

The rate of heating in its relation to moisture content is shown in Fig. 1. Two lots of wheat are here compared with regard to the time required to become actively heating. One carload contained 15.5 per cent, the other 16.5 per cent of moisture. They were put in inside elevator bins on September

11 and 12 respectively. The lot containing 15.5 per cent of moisture kept 333 days without heating sufficiently to necessitate turning and cooling, while that which contained 16.5 per cent had to be run and cooled in 49 days. Had these been stored in the spring or summer, the time elapsing before heating began would have been much shorter, but the cold fall and winter weather which intervened resulted in the heat being lost into the air or surrounding material so fast as to preclude a rapid rise in temperature.

This leads to a consideration of the relation of air temperature to the rate of heating. The lot of wheat containing 16.5 per cent of moisture, mentioned in the foregoing paragraph, required from September 12 to October 31 to rise from 70° to 80° F. and require attention. The mean air temperature during this interval was 44.3°. Another lot of similar wheat, containing the same percentage of moisture, had been stored July 28, and the temperature of it rose from 70° to 80° F. in 11 days, the mean air temperature of this interval being 62.1°. These data are graphically shown in Fig. 5. The difference in the rate of heating was due to the greater rate of heat loss into the cold atmosphere in the fall. While this difference might not have been so great in a larger mass of grain, it shows the effect of seasonal influences.

The location of the bin in the elevator may have considerable to do with the rate of the loss of heat from the grain. This is shown by experiments conducted with a car of wheat containing 17.5 per cent of moisture which was stored in an outside bin in a steel elevator on September 10, and kept until June 10 the following year, a total of 303 days. Its record is compared in Fig. 4 with that of a car containing 16.5 per cent of moisture which was put in an inside bin at the same time and had to be run and cooled in 49 days.

The initial temperature of the grain is also significant. This is shown by the records of bins 32a and 158b. Both were filled at almost the same time with wheat containing 16.5 per cent of moisture. The initial temperature of that in bin 158b, as shown in Fig. 2, was 74° F., while that in bin 32a was 70°. It took the latter over five times as long to reach a temperature of 80°. These data also illustrate the acceleration of respiration

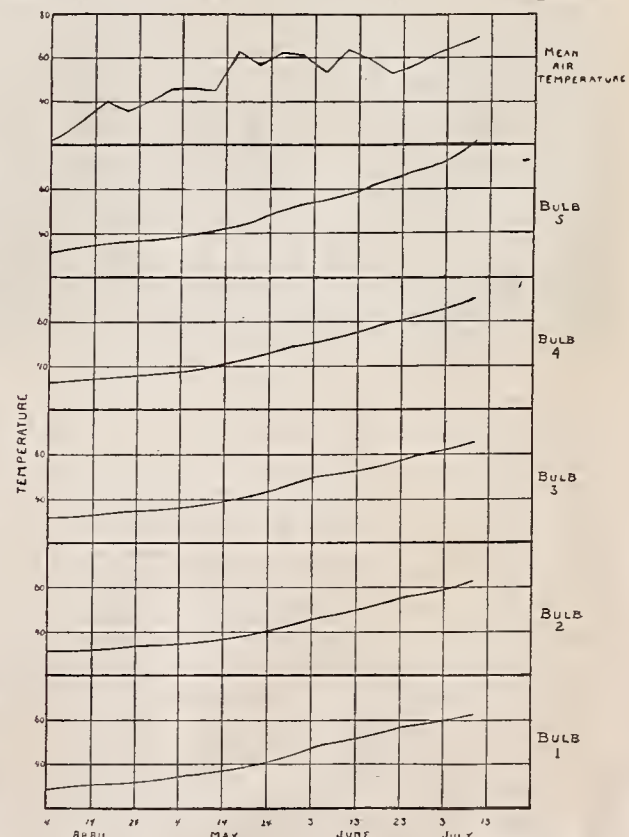


FIG. 3.—A COMPARISON OF THE TEMPERATURES RECORDED AT DIFFERENT DEPTHS IN A BIN OF SPRING WHEAT

with a rise in temperature, the curve being logarithmic in form, and the rate very rapid as the temperature approaches 80°.

When uniformly mixed wheat heats as the result of respiration, the highest temperatures are usually reached near the surface. The exact location of the warmest portion varies with the weather. When the surrounding air is cold, as in midwinter, it is usually from 15 to 20 feet below the surface,

*A paper read at the Second Inter-State Cereal Conference, University Farm, St. Paul, Minn., July 1, 1916.

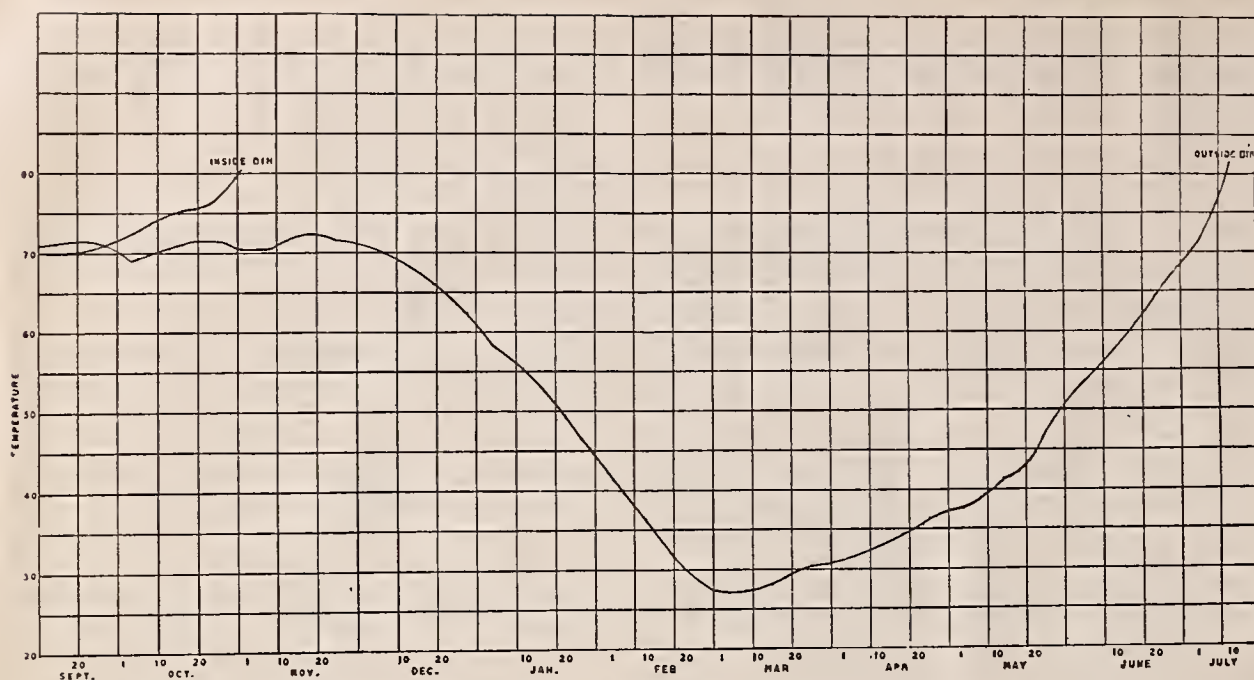


FIG. 4.—RELATION OF LOCATION OF THE GRAIN IN ELEVATOR DURING WINTER MONTHS TO RATE OF HEATING

while in mild or hot weather it is likely to be at a depth of from 5 to 8 feet. The changes in temperature at different depths are shown in Fig. 3, which gives the record of a bin of wheat that was at freezing temperatures on April 4, and was heating on July 10. At this time the temperature of the grain surrounding bulb 5, at a depth of 8 feet, was 81° F., while bulbs 4, 3, 2 and 1, which were at depths of 18, 28, 38, and 48 feet, respectively, were in grain at temperatures of 70°, 65°, 62°, and 62°. The larger quantity of oxygen available to support aerobic respiration in the kernels near the surface no doubt is responsible for the more rapid rise in temperature in that portion; the heat produced in the surface layers is lost into the surrounding atmosphere, however, and consequently the highest temperature is at a short depth.

The material of which the bin is constructed affects the keeping qualities of damp grain in just the proportion that it affords heat insulation. The four materials used in bin construction are ranked in heat-insulating value by the leading elevator construction companies of Minneapolis as follows: (1) Hollow tile, (2) wood, (3) concrete, and (4) steel. In cold weather the better the conductor in which the grain is stored and the more exposed the location, the less rapidly will damp wheat heat. In hot weather the reverse is true, since the heat of the air will be transmitted to the grain through a poor insulator, and the rate of respiration accelerated through the resultant rise of temperature.

To recapitulate briefly, the handling of wheat in bulk introduces certain difficulties which do not exist to so great an extent when it is handled in sacks. Wheat which is not perfectly ripe when harvested "sweats" either in the shock, stack, or bin. If normally dry, this sweating improves the baking qualities of the flour. The maximum limits of moisture which hard spring wheat may contain without danger of heating in a temperate climate are between 14.5 and 15.5 per cent. Whether it actually heats or not depends upon several factors, including the hardness of the kernels because of the relation of kernel density to gluten content, the size or dimensions of the bulk, temperature of the atmosphere, initial temperature of the grain, location and consequent exposure of the bin, and the material of which the bin is constructed.

PRICES FIXED IN ENGLAND

Having begun the system of fixing prices in England, the Government has found it impossible to leave off, so that at the present time grain, flour and bread values are fixed.

The price of wheat, for delivery before December 1, 1917, is 7 3/6 per quarter of 504 pounds, or approximately \$2.18 per bushel. Eighty-one per cent of flour must be extracted from the wheat and 5 or more per cent of other cereal added. This flour sells wholesale at 44/3 per sack of 280 pounds, or about \$7.75 per barrel.

Bakers are allowed a certain profit and the retail price of bread is fixed at 9d per 4-pound loaf, of

4 1/2 cents per pound, and a 1-pound loaf for 5 cents. The discrepancies which occur between manufacturing costs and selling prices are being made up by the Government to the tune of about \$200,000,000 per year.

WHEN FARMERS SELL WHEAT

The U. S. Agricultural Department has prepared a tabular exhibit showing the monthly marketings of wheat extending back to July, 1913, which contains actual figures that bear out what is a matter of the dealer's common knowledge as to times when the greatest deliveries of wheat are made by farmers.

Of the four crops for which figures are furnished, those from 1913 to 1916, inclusive, the largest deliveries, averaging the four crops, were made in September, or 15.25 per cent. August was the next largest month, the average of the four crops (not in bushels, but percentages) being 13.87 per cent. July came next with 13.55 per cent. The extraordinarily low deliveries in July, 1915, pulled down the percentage of July deliveries for the four years.

From September the deliveries of wheat gradually decrease. In October, on the four crops they averaged 13.5 per cent. In November, 10.52 per cent, and December, only 7.92 per cent. January shows a still further decrease to 6.45 per cent, February to 5.15 per cent, and March to 3.8 per cent.

April shows a slight increase to 4.12 per cent,

but May brings a decline to 3.5 per cent, while June shows the smallest deliveries of the year, or only 2.9 per cent.

In the four crop years, the largest deliveries in any one month were in September, 1914, amounting to 125,000,000 bushels. They were almost as large in September and October of 1915, being 122,000,000 and 123,000,000 bushels, respectively.

The smallest deliveries in the 48 months were in last June, only 13,000,000 bushels. The next smallest month was June, 1915, when the deliveries were 17,000,000 bushels. Last May they were only 18,000,000 bushels, and in April 19,000,000 bushels. The latter figure was also the delivery of farmers' wheat in April, 1914.

CANTONMENT ELEVATORS

Up to the present time forage oats for army animals at cantonments has been bought in sacks. On account of the constantly rising cost of bags, and the vast quantities of oats which will be needed at the camps, the Council of National Defense have been working on the problem of eliminating the use of sacks and handling these forage supplies in bulk. Mr. C. H. Langenberg, of Langenberg Brothers Company, grain merchants, St. Louis, who is giving his entire time in free-will service on the Committee on Supplies, of the Council, has had the matter in charge. The volunteer services of Mr. Robert P. Durham, of Chicago, were availed of in working out in the technical details of the handling and storage. Mr. Durham was regarded as peculiarly fitted for such capacity on account of his exhaustive study of the comparative advantages of sacked and bulk grain methods in Australia in 1915 and 1916, and his experience in handling forage oats in France during the present war.

These gentlemen have designed an elevator of simple and economical plan, readily capable of construction by the general contractors building the cantonments, which will secure the desired results at a minimum of expenditure and will save the Government some millions of dollars as compared with sack handling methods.

Suggestions were freely offered in a patriotic spirit by all of the large elevator builders and offers were received to draw the plans without charge from the Folwell-Ahlskog Company and the MacDonald Engineering Company. It was decided, however, that the most economical results could be obtained by handling the matter departmentally, and having the cantonment contractors carry on the construction,—a decision which will probably be followed.

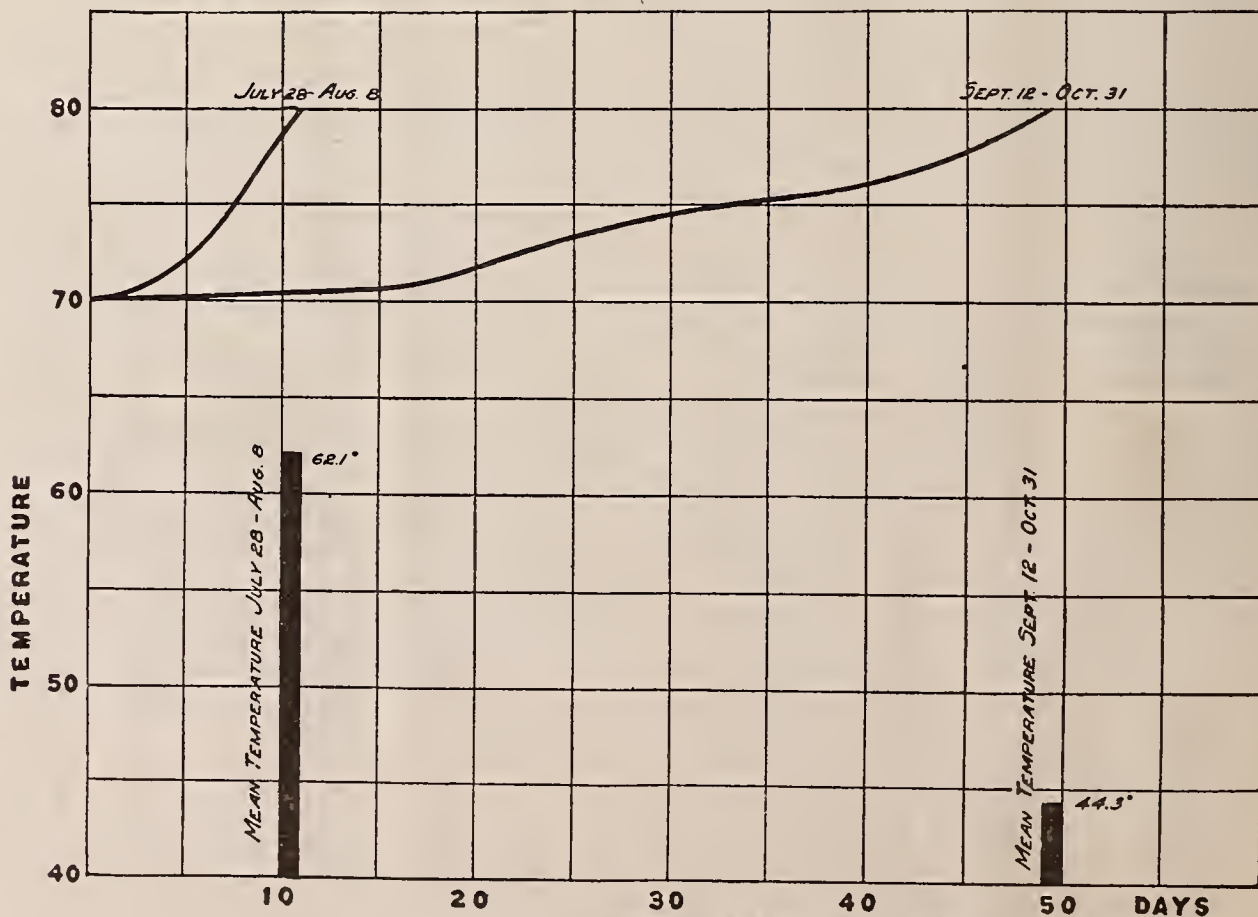


FIG. 5.—THE EFFECT OF ATMOSPHERIC TEMPERATURE ON THE RATE OF HEATING

Concrete Spalling in Elevator Fires

Some Interesting Facts Disclosed by the Investigation of the Kentucky Public Elevator Fire

BY A. W. WILLIAMS

THE insurance adjusters in their report on the fire which destroyed the Kentucky Public Elevator, Louisville, Ky., in February of the present year, stated that it appeared as though a clearance space of 50 feet, between concrete grain tanks and frame buildings, was not enough to protect the tanks from outside fire, and that a fire wall should be erected. However, after a lengthy investigation this has been declared unnecessary, as the new plant, contract for which has just been awarded, will be fireproof throughout.

The investigation uncovered some interesting facts relative to elevator construction. In the old workhouse erected 36 years ago, when concrete was hardly known, wood and steel construction were used, this being covered with corrugated metal. In 1911 the company completed a new bleacher tank for bleaching oats, this being directly north of the main elevator, and the concrete was poured in the early fall, before freezing weather set in.

In the same fall and winter the company erected the battery of 16 concrete grain tanks, 54 feet west of the workhouse, separated by switching tracks for loading and unloading grain, and set on a deck, in parallel rows of eight each. The tanks were connected with the elevator building by a bridge. This concrete was poured in November, December and through the winter, most of it being poured on fair days, while steam pipes were run through the cylinders, and steam kept up night and day so that the concrete would not freeze. The Witherspoon-Englar Company of Chicago built the tanks, which were made of the best Portland cement, fine washed river gravel, silica sand in the base or deck, and river sand in the tank construction. The walls were 7 inches thick, and heavily reinforced.

The bleacher tank was built of the same quality of cement and gravel, but silica sand was used instead of river sand in the construction. In both cases the workmanship or construction from an engineering standpoint was excellent.

When the big fire struck the workhouse, this year, a heavy wind was blowing from the south, and the flames were driven directly north and against the bleacher tank. This tank was heated rose hot, the metal pipes, ladders, etc., were melted loose, but the tank came through unscratched. The elevator tanks, across a 54-foot areaway, did not receive the full effect of the flame as did the bleacher tank, but were heated good and hot. However, the fire department was very careful not to play streams on any of the concrete work, so that there would be no spalling or chipping.

After the fire was finally extinguished the effect on the tanks became noticeable. The elevator tanks began peeling and chipping, or spalling as it is known in the engineering world. As the tanks cooled out great flakes of concrete came rumbling down, a rain of scorched material falling for several days. However, the bleacher tank showed absolutely no results of the fire, came through uncracked, and as firm as the day it was turned over to the company as completed.

This condition started the officers of the company, engineers, insurance men, etc., to begin figuring just where the trouble was, and why one tank, heated far hotter than the others, should not scale, while the entire eight tanks at the west were practically ruined. It was suggested that this might be due to the fact that the bleacher tank was empty, but a number of the elevator tanks were empty, and those filled with corn and oats came through as well as the empty ones, showing that the pressure of the grain, expansion from heating, etc., was not responsible, and that the trouble lay in the material used.

The fact that the tank built of silica sand stood the test, while those failed in which river sand was used, left very little room for doubt but what river

sand was not the equal to silica sand in cases where concrete is subjected to severe heat tests. Considering the fact that with the exception of sand the same identical materials were used throughout, and that the concrete was not allowed to freeze in the tanks built in the winter, there is no other solution to the problem.

Getting down to a discussion of the comparative merits of river and silica sand, the experts claim that silica sand is a pure mineral sand, mined, crushed and washed and entirely free from vegetable matter, or combustible chemical organism. The river sand contains small particles of heavy vegetable matter, which being heavier than water sink. It also contains, as shown by the microscope, many particles of fine coal. These materials are so heavy that even when sand is washed

strains if patched up. It was therefore decided to line each tank with new 7-inch reinforced walls, extending 90 feet to the top, this reducing each of the eight tanks by about 10 per cent total capacity.

While it appears as though such cases come up very seldom, two such cases have come up in Kentucky since the first of the year. At Henderson, Ky., in the fire at the Waller Elevator, the same thing happened. Here the old workhouse was of wood, and when it burned the flames played on the three end tanks of a battery of 18, set in rows of three. These three tanks spalled and chipped in the same manner as those at the Kentucky elevator. Here river sand was used, it being taken from the Ohio River, near Henderson.

Concrete stands a lot, and is a wonderful resistant of fire. However, it is essential that either all surrounding buildings be of fireproof construction, or that fire walls be built to protect the concrete tanks, unless the concrete is of a nature that is so fire resisting that damage can not be done from the interior or exterior of the tanks. This can probably be accomplished by using silica sand in the concrete, as the test at Louisville has gone a long way toward proving that the trouble lay in



WHAT FIRE DID TO THE CONCRETE TANKS OF KENTUCKY ELEVATOR COMPANY

they remain. Due to the fact that the Ohio River is a great highway for coal between the mines and the South and West, the river is full of coal, which through the action of the water has been ground into minute particles, and these grains rounded, the sand also being rounded from the action of the water.

It is said that when such sand comes into contact with extreme heat the vegetable and combustible matter explodes, forms gases, etc., and that this is probably responsible for the damage that was done. Again the cohesion of river sand is not as great as that of silica sand, the latter grains being sharp, and full of angles, which set tighter and harder. River sand sets faster in concrete, but actual tests have shown that after being set, it has not the strength of silica sand, and that under a breaking test the average breaking stress of river sand is 65 pounds to the square inch under that of silica.

Scaffolding was extended up the outside surface of the tanks of the Kentucky Public Elevator Company, and careful examination made of the damage. It was found that small cracks or fissures extended through the concrete in many places, and that the walls were not suitable to stand further

the cement used, and the question is one that has many engineers wondering, and will result in many arguments before it is threshed out.

The elevator operator in many cases stands a greater danger from fire of outside origin than other operators of large concrete buildings. This is largely due to the fact that hundreds of old elevators, erected in the days when concrete was practically unknown, are of wood and iron construction. Later on the elevator men in keeping up with progress and the increasing demand for storage space, turned to concrete for storage, and erected large batteries of tanks. However, with the mill building of wood, and located within easy handling distance of the elevator tanks, the latter are always menaced by the chance of fire breaking out in the older frame buildings.

Of course, it is easy to say that fireproof construction will prevent damage, but absolute fireproof construction is hardly to be had. If the concrete is not damaged, the chances are that the grain will be so badly damaged that it will not hardly be good for chicken feed. This puts it up to the elevator operator to erect fire walls to protect the face of his tanks, where frame buildings are within a short distance of such structures.

The insurance people have taken note of this fact due to the fires at Louisville and Henderson, and probably a new rate will shortly be posted in cases where the bins are protected by fire walls, or are free from hazards accruing from adjoining buildings. This apparently was a new idea at Louisville, and there is no doubt but that the insurance people will shortly arrange a new schedule. The Louisville plant was thought to be fireproof and danger free, and the tanks were insured at a very low rate.

As explained by the company, it is the outside hazard that the elevator man has to figure upon, in declaring a concrete tank exempt from fire. It

is not always possible to pass up these hazards and erect new buildings in their place, therefore the fire wall plays an important part. Again, due consideration should be given to the matter of sand and other materials. For instance in some sections of the country the gravel deposits are so oily, the gravel being of oily rock, that it will not set properly in concrete, and in case of fire would undoubtedly throw off so much gas that serious results would show later.

Whether or not the river sand was responsible for the damage done in these two cases is a matter that is proving of much interest, and it is certainly worthy of consideration.

good service from the use of rubber belts, even for fast running machinery.

But there is another class of belt which is not used as much as it should be used, simply because there are makes of inferior belts on the market and if you have once been bitten by some of these stretching, slimpsey belts, you are apt to condemn the whole lot of similar belting and will have nothing whatever to do with that kind in any shape or manner.

The belt here referred to is the "Impregnated, Stitched, Cotton Belt." The original and pioneer belt of this kind was called the "Gandy" after its inventor. But as the patents have expired; anybody and everybody makes that kind of belt nowadays, with result that the market is flooded with worthless kinds which would try the soul of a saint, much less that of a grain elevator owner or manager.

But it is possible to test this kind of belting in a very simple manner and to select from the samples offered those which will yield most excellent service in the grain elevator or anywhere else where good belts are required. To select good belting of this kind, procure samples at least three inches square.

Any other convenient size of sample may be used, but 3 inches is very convenient and the sample must be square. Cut or mark an equal length on side and end of the sample, then carefully separate a couple of threads from each—side and end. Straighten each thread carefully without untwisting it, or if some of the twist comes out, retwist again same as before straightening.

Measure the straightened threads and see how much each has elongated. If $3\frac{3}{4}$ inches long, from a 3-inch sample then the elongation is 25 per cent. The elongation may be found to be more or less than that amount. If more or very much less, reject the belt from which the sample was taken. If the elongation was more than 25 per cent, the belt will stretch too much in use. If the elongation be much less than 25 per cent, then the belt is too closely woven to wear well. 25 per cent of possible stretch gives the best results and belts should be selected which are as near as possible to that figure.

Then there is another test to be made. Unravel one of the threads from the end and another thread from the side of the belt. Count the number of smaller threads in each. If there are five or six in each, then the belt is good. If there should be more or less than five or six, it would be well to reject the sample.

But if there be more small threads in one large thread than in the other, no matter in which one, then reject the sample in every instance. When there are the same number of threads in the warp of the belt as in the filling, then the weave is said to be "equalized" and is of the best possible proportions and you may select belt like that sample and rely upon its wearing well and not stretching very much when in use.

But beware of the stitched cotton, impregnated belting which does not come up to the above noted tests. It will never give the service you require. It will be forever stretching and require frequent "taking up" and the belts will shrink in width and therefore cannot give the necessary power. Ware of such belts and purchase only those which will stand the very simple tests given above, then you will be independent of the high cost of leather belting and your machines will always run well.

Just one more thing,—when calculating motor drives in a grain elevator, don't use too thick belting and better use only four-ply, then calculate the belt width so as to give the required power with a pull of not over 40 pounds per inch of belt width. Do this with each and every belt and you will never have a poorly working belt in the whole place.

THE only cereal which yielded above the average last year in world production was rice. Japan had 9,851,810 bushels more than the year before; our yield increased from 580,000 tons in 1915 to 842,000 tons last year; Korea has 1,730,000 tons, the highest yield on record; and the yield for India is estimated at 34,079,000 long tons, an increase of 4 per cent over the previous year.

The Electrically-Driven Grain Elevator

Power and Lighting Advantages—Location of Engines and Motors—Installing Electric Drives—Some Tests for Motor Belts

BY JAMES F. HOBART

BEYOND a doubt most of the grain elevators to be built in the future, or the larger ones at least, will be driven electrically and not loaded with engines and boilers except those required for heating and drying.

The electrically-driven elevator leaves very little, if anything to be desired in the way of power service. The power is always ready. There seldom is a breakdown or failure of the electrical current and if care be taken to secure and install alternating current motors, the power troubles of the elevator will be reduced to as near zero as will ever be possible as long as steam or electricity must be used.

It is possible, in most places, nowadays, to secure current from some of the high tension systems which pass wide extents of country in almost any direction, and so small is the transmission loss of high tension current that it pays to build and equip branch lines of considerable length to supply a plant or a group of plants and probably also a bunch of electric lights.

As stated, only alternating current motors should be used for they are far better in every way than the direct current motors. The alternators burn out very seldom, will handle a heavy overload for considerable lengths of time and the lack of commutators and their attendant ills is a matter of great importance. Therefore, install alternating current motors by all means.

In locating motors in a grain elevator, the motor which drives each machine or group of machines should be placed where it is most convenient to deliver power to the machine by means of a single belt, or even closer if it be possible to direct connect the motor to a machine or to its shaft.

Distant control mechanism has been brought to such a high degree of perfection that it is not necessary to place the motors where they may be readily reached for the purpose of stopping and starting. Instead of that, the motors may be located in the top of the elevator and the starting mechanism placed on the ground floor or wherever it be most convenient to stop and start the machinery.

It is no longer necessary to provide heavy or stiff foundations for modern electric motors. These machines have been so designed and constructed that they are self contained and may be placed upon a solid foundation or set upon any scantlings or timbers which will bear the weight of the machine and there the motors will run smoothly and deliver their maximum power without any danger of springing the machine base or of binding its armature shaft.

Thus it is necessary, when placing motors in elevators, particularly at the top thereof, merely to provide adequate timbering to sustain the weight of a motor and the pull of its belt. Then the motor will do its work properly, even though hung up "neck and heels." Sometimes it is possible to suspend motors from overhead timbers by means of four or more screw bolts or suspension rods, thereby making the locating and placing of electric motors a matter of the greatest simplicity.

Now and then an elevator will be found so very

remote from an electrical distribution plant that it would not be profitable to build a branch line for the purpose of supplying that establishment with electrical power.

In such isolated cases, there are two courses open to the elevator man. He may put in a hydro-electric plant at some nearby water power and thus supply current to drive his elevator and also to light the surrounding territory and also to sell power to other manufacturers in his vicinity.

The other way is to place an electric power plant on the premises, drive the elevator electrically and locate the little power plant outside of and independent of the elevator business. But, in deciding upon the installation of a small, isolated electric plant, the elevator man should never jump into it, hap-hazard. Instead of that, he should consult with an experienced electrical-mechanical engineer and be guided by the advice of that man as to what kind of plant, machinery and service should be put in to drive the elevator and to supply current to possible customers in the neighborhood.

So many factors enter this problem and require consideration, that it is impossible to tell—at a distance—and without first making a full study of existing conditions, requirements and probabilities of each problem, then no general advice of much value can be given here.

But, once it has been decided to drive the new elevator electrically, proceed to make a very close study of each and every requirement in order that each motor may be located in exactly the right position to deliver power to its machine with the least possible loss, either mechanically or electrically.

See to it that all shafts are short—very short, and that not a foot more steel than is actually necessary, enters therein. Let all shafts be erected in a manner which not only permits of their being accurately aligned, but which makes it almost impossible for the shafts to get out of alignment through changes in timber positions through their movement when storage bins are filled with grain or emptied.

This means that not only should each shaft be mounted upon solid timbering, but that each journal should be hung in a fully adjustable bearing. And furthermore, to reduce friction losses to the lowest terms, each bearing should be fitted with approved roller bearings, of which there are several types upon the market.

When a motor is connected with a shaft mounted as above, and the motor is so placed that the belt runs true and tracks squarely to the centers of both pulleys, then you may be sure that you are getting about all the power there is out of the motor and that a lot of energy is not being consumed in driving ill hung shafting or pinched journals.

And when the motors have been installed, do not place upon their pulleys some inferior belts, just because they are low-priced. If you wish to use leather belts, you may do so if you are able to pay the price thereof. But you may obtain exceedingly

OHIO TRANSFER ELEVATOR

Good location, complete equipment, and a sound business system combined in building up the substantial turnover of the Horn Brothers Company, whose elevator and transfer house is at Monroeville, Ohio, and the branch store at Norwalk.

The elevator has a capacity of 50,000 bushels and the Food Administration restriction on storage will trouble it but little, as it normally handles 300,000



ELEVATOR OF THE HORN BROTHERS COMPANY,
MONROEVILLE, OHIO

bushels of local grain a year and about the same amount in and out which they receive from the West. That makes 12 turnovers of complete capacity each year, in addition to the considerable business in seeds, hay and straw.

The house is equipped with four stands of elevators; two No. 8 Monitor Cleaners, an automatic scale and a Howe Hopper Scale; a 5,000-bushel Randolph Grain Drier; 14 Fairbanks-Morse Electric Motors; two Standard Seed Cleaners and a Western Sheller.

The company is officered by Philip Horn, president and manager; J. P. Easton, vice-president; Albert H. Horn, secretary; William C. Horn, treasurer and assistant manager.

THE ELEVATOR MANAGER AND
SEED CORN

BY J. W. HENCEROTH.

One of the most important factors that will make for a good crop of corn next year is good seed. Have you, as a manager, ever given this matter serious consideration? Have you ever seriously urged your farmer patrons to select their seed corn in the fall? Where the corn is husked from the stalk there is plenty of time for the farmers to gather their seed corn for next year's crop as they husk this fall. An extra box or bag may be tied on to the side or rear end of the wagon and when an ear is found growing on the right kind of a stalk, and that meets the ideal of the grower, it should be tossed into this box or bag and kept separate. There is no doubt but what the proper selection of seed corn, coupled with the proper drying of the seed will mean a better stand next year.

Many farmers believe that it takes a great amount of extra time to select seed corn in the fall. This is not true if handled as suggested above. Just a little urging on the part of the elevator manager will encourage a great many farmers to gather their seed corn as they husk. Where the corn is already in the crib or being husked from the shock the seed may be selected and stored in a cool dry place. It is advisable to place the corn on racks or screens so that it may dry out thoroughly. If the corn seems to be full of moisture, a little fire aids greatly in drying out the corn.

Many farmers do not have a satisfactory place to store the corn. Have you, as a manager, ever thought of asking them to gather their seed corn and bring it to your elevator to have it stored in a cool, but not cold, dry place until spring? If you have a satisfactory place many of your customers would be glad to take advantage of such an opportunity. It will also give you a chance to have your farmers use better seed corn of a uniform type. The planting of the proper varieties and

type of seed corn is just as essential and valuable to the community as the raising of a uniform type and breed of live stock. The raising of high-grade pure-bred Holsteins has made the western region of Ohio and certain sections of Wisconsin famous. Buyers go to these communities because they know they can get what they want. If your farmers have high-grade seed corn of uniform varieties it will mean equal advantages to them and to your community. Such a system, as suggested, will give you an opportunity to handle seed corn for farmers who do not have the best kind.

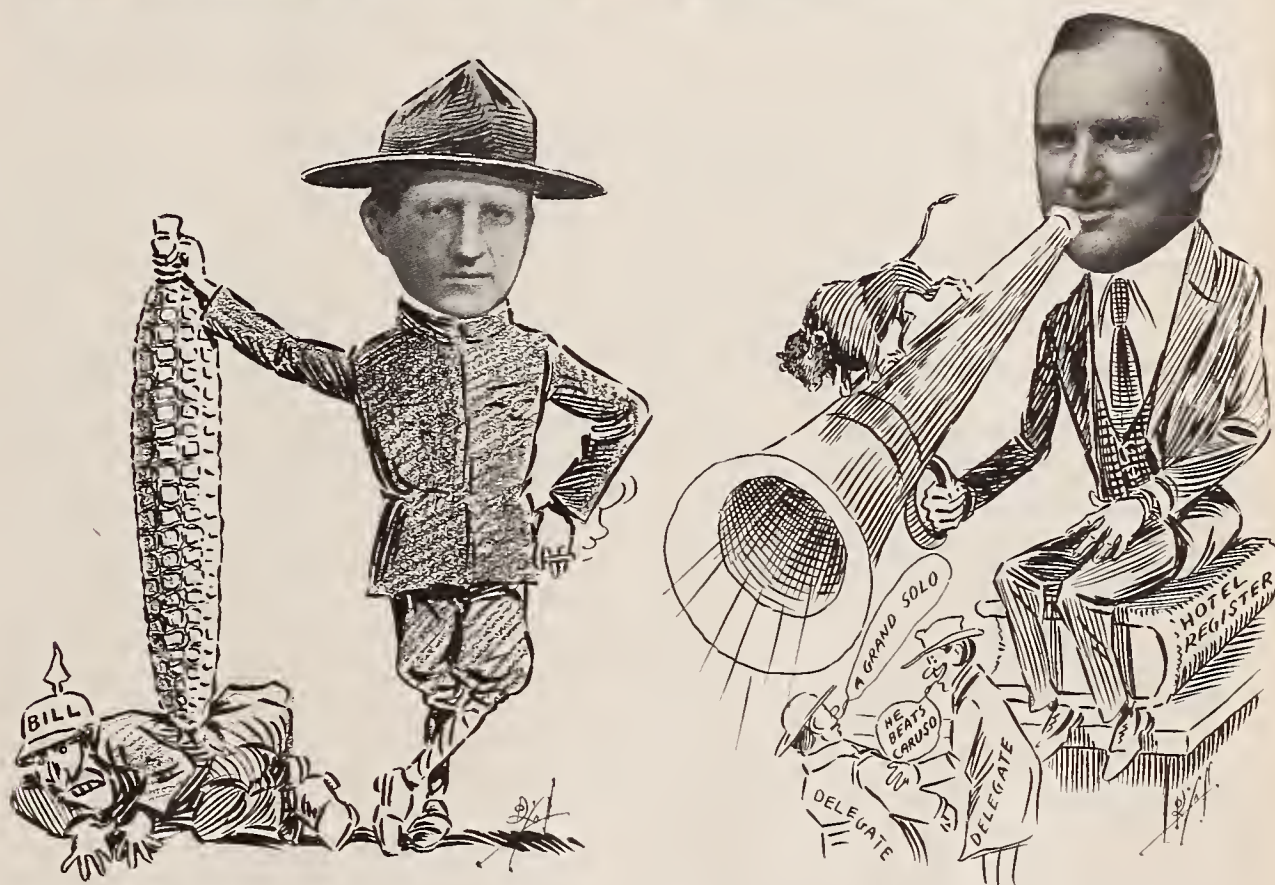
No matter how much time your customers spend fitting the seed bed or caring for the crop or how

much they invest in fertilizers, lime or machinery, they will not secure the largest crops and you will not do the biggest business unless they have the best seed possible to plant.

LICENSING COMMISSION MEN

Howard B. Jackson, Grain Corporation agent at Chicago, states that all commission merchants, even if not buying or selling for their own account, require licenses, and the intention is only to exempt trading in futures in the pits of established exchanges, which class of trading is directed by law given to the control of the President.

OUR VISITORS



THE nonchalance of Scott F. Evans, in the sketch above is merely assumed, we suspect. He has a big job ahead of him and is too big a man not to realize it. However, we are willing to wage much of our worldly wealth that if Scott Evans undertakes to pin Bill Hohenzollern down and keep him there, he'll do it. His weapon is "Corn"—and in this war of all wars it is a powerful arm and which, without exaggerating the facts in the case, may beat the hugest of the "Busy Berthas."

Logic is unanswerable. Logic says that Scott Evans will contribute largely to winning the war. How? Well, the war will be fought to a successful conclusion by our armies. Our armies must have food. We will provide the food by conservation and substitutes. Scott Evans will teach the people that corn is a good substitute. Therefore, he will be a considerable factor in winning the war.—Q. E. D.

The sagacious Mr. Hoover, whose most admirable trait is the ability to pick capable subordinates, looked over the field carefully after deciding upon a Corn, Corn Starch and Oats Division of the Food Administration, and chose Scott Evans to head it. And once again he scored a bullseye. Mr. Evans, as general manager of the Baltimore Pearl Hominy Company, ought to know a lot about corn. And he does. His cranium is crammed full of all that is necessary to know about the King of American Cereals. Add to that knowledge his executive ability and the answer is easy.

THE scenic beauty of Niagara Falls was awarded full tribute by all who attended the Grain Dealers National Convention. But there were almost no comments made about the "mighty roar of the great cataract" as the railway folders describe it. This appeared strange to the Buffalo contingent who knew that many were viewing the Falls for the first time. Finally a delegate from the Southwest solved the riddle by saying: "That's a pile of water and sure does make a heap of racket but it ain't nowhere in it with that there fellow who's been toting around the big megaphone." And the others within hearing nodded their heads in agreement as there appeared in the distance the Hon. Fred E. Pond and a clarion call burst loud above the noise of the great waterfall.

Secretarially, Fred Pond has received many laurel wreaths. Megaphonically, his reputation is newer, but just as firmly established. Night and day, the ubiquitous Fred and his inseparable megaphone remained on the job, and when he got any sleep is a mystery.

Our artist has shown him sitting down on the hotel register, but this was a rare occurrence. Mostly he was standing majestically poised on the desk in the lobby, with one foot balancing on the inkwell and the other on the fingers of a room clerk. Many carried away from the convention this never-to-be-forgotten picture, but they also carried with them a vision of dauntless, untiring and indomitable energy directed in the best way for the comfort and entertainment of the Buffalo grain trade's guests.



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

CHICAGO, NOVEMBER 15, 1917

MILLERS' AND GRAIN DEALERS' PRICES

WHILE the arrangement between the Bureau of Markets and the Food Control Grain Corporation, provides for fixing the grade, and therefore the price, at which country elevators may sell their wheat direct to consumers, i. e., the mills, it does not provide how much they shall pay for it from the farmers. Nor how the competition with mills can be met. In fact the Bureau of Markets seems to have messed up the situation still more in a recent announcement. Answering a query relative to this matter, the announcement states:

The Department appreciates that the handling of wheat on a dockage basis is new to your locality, but after the matter is once thoroughly understood I am certain that the members of your organization will be very well satisfied with the dockage system, and that all will agree that a load of wheat with 1 per cent of weed seeds, sand, etc., should not be purchased at the same price as a load of wheat free from such foreign matter. This same condition will likewise solve the difficulties with reference to the competition of the miller referred to in your letter. For example, a wagon load of wheat consisting of 100 bushels, at \$2 per bushel, would amount to \$200, assuming the same price was paid for the wheat and the weed seed, dirt, and chaff contained therein. Assuming this load of wheat to contain 1 per cent dockage, consisting of weed seeds, dirt and other foreign material, would leave a net of 99 bushels of dockage free wheat. For this you could pay \$2.02 per bushel, making a total cost of \$199.98, so that if you have been able to compete with this miller heretofore, you should be able to meet the same competition under the new standards, if properly handled.

¶This settles the question very nicely so far as the Grain Standards Act is concerned, but the Bureau appears to forget that the grain dealer has to consider the prices set by the

Food Control Act also. If the wheat is worth only \$2 a bushel, he cannot pay \$2.02 for it as the price at the terminal, his only customer, is fixed for dockage-free wheat, and in addition the elevator pays the freight on the dockage and gets nothing for it. [See "Arbitration Decisions" on page 316.] The miller competing with the elevator can and does disregard the dockage unless it is excessive, as he pays no freight and can get about \$40 per ton for it, mixed with his feed. ¶Rule 15 of the special rules and regulations for grain elevators and millers provides against inequality in price making at any point, but the rule, so far as dockage is concerned, is inoperative at country points unless every grain handler, miller and elevator, shall be required to determine dockage and fix his price on dockage-free grain, giving in his report the average amount of dockage obtained.

GRADING AT NON-INSPECTION POINTS

THE Grain Standards Act provides that grain shipped from a point at which there is no inspector to a non-inspection point does not have to be graded. Under the Food Control Act a specific price by grade is set for wheat. As the latter act supersedes the former some provision had to be made for determining the grades at country points. On November 3, the Bureau of Markets announced that an agreement had been reached with the Food Administration whereby an elevator shall send to his grain zone agent of the Grain Corporation a sample of the wheat involved in each such transaction. The zone agent shall fix the grade of the wheat, but in cases of doubt will refer the samples to the grain supervisor of the Department of Agriculture. The supervisor, however, will in no case place an original grade upon samples; they must go to the Grain Corporation. Instructions for drawing, labeling, packing and shipping of samples will be furnished by the zone agent. Of course this provision will be unnecessary as soon as the fixed price is taken from wheat.

CAR CAPACITY ONLY

RULE 9 of the Food Administration's regulations provides that wheat, oats, corn, rye and barley in car lots shall be loaded to the car capacity. This order supersedes and displaces the minimum agreements for the time being, but will work no great hardship as most mills are glad to get all they can and contract business is reduced to a minimum. ¶The Administration is making every effort to provide cars. A significant order was issued to the iron and steel trade last week. According to this ruling every order on the books, except where fabrication was in process, had to be placed on cars and a bill of lading obtained before Monday, November 12. The reason for the order was not given, but it has every appearance of an attempt to clean up the steel shipments so that the cars could be released for other purposes. The steel trade has never had trouble in obtaining cars and it may have dawned on the authorities that grain shippers and others were entitled to more consideration than they had been getting. While most steel shipments are made in gondola cars, still the order would

release a great quantity of box cars (if that is the purpose) and it is to be hoped that the grain trade will derive the benefit.

FEW CO-OPERATIVE COMPANIES EXEMPT

MUCH objection was made to the section of the Food Control Act which exempted co-operative companies and farmers from the operation of the law. A recent ruling, however, reduces the number of those who may claim immunity. If a co-operative elevator handles grain belonging to any person not a member of the co-operative company, it immediately loses its standing as a co-operative concern and must operate on the same terms and under the same license as a private house. ¶In a similar manner the farmer is affected. He can store his own grain for an unlimited time if he thinks it will do him any good, but if he should buy a neighbor's grain and store it along with his own, he is violating the law against dealing in grain without a license. ¶Not many farmers, probably, will be required to take out a license, but there are few co-operative elevators which will be exempt.

AN ENCOURAGING PROSPECT

JULIUS H. BARNES in conference with the district managers of the Grain Corporation at Chicago on November 12, gave an encouraging outlook for the success of the food control program. Production, conservation and economy were the three principal reasons for the passage of the Food Control Act, and in all respects results seem to have justified the Act. ¶Production certainly has been increased this year and there is every prospect of a still greater production of wheat next year. The conservation program, Mr. Barnes predicts, will show a saving of 100,000,000 bushels of wheat in America for the season, and that flour exports will increase from the normal 15,000,000 barrels to 35,000,000 barrels. Economy for the people has been secured through stabilizing prices, limiting profits, and eliminating unlicensed speculating. ¶Mistakes have been made, of course, but the total good accomplished has so greatly exceeded any harmful results that the Food Administration can begin to congratulate itself on its program and accomplishments.

FREIGHT ADVANCE LIKELY

ON November 5 the Interstate Commerce Commission called upon the Eastern carriers to show their financial condition. This was the first move of the reopening of the 15 per cent advance case which the shippers succeeded in defeating two years ago. The Commission initiated this move on their own account, either to secure figures at the apex of the year's business, making it more difficult for the carriers to show cause why the advance should be granted, or, as is more generally believed, because the Commission felt that the railroads should have relief and that any unnecessary delay would handicap them in meeting the ever increasing demands of transportation. ¶At the preliminary hearing there was no violent objection to the advance, if it were

clearly shown that the roads really need increased revenues. That is the general attitude of shippers. They are not crazy about paying an advance of 15 per cent in rate, in addition to the 3 per cent tax, but they recognize the absolute need of efficient railroad facilities at this time and are willing to do their share in assuring such a condition. ¶ Western roads are to be given a hearing on a general advance on December 17.

THANKSGIVING

EVEN in the midst of war, with American boys leaving on every steamer for the trenches in France, with living costs at ruinous heights, with taxes and business expenses mounting with each rising sun,—even with these we have much to be thankful for. ¶ Pessimists had preached that America had grown soft with ease; traitors had prayed that the country might be found unreconcilably divided; well intentioned fools had pleaded peace at any price; and a few had exploited the times and the people for their own profit. ¶ But we can give thanks that the blood of 1776 is still red in our veins; that back of the President is the united nation with only a froth of malcontents on the mighty wave of patriots; that in his wisdom our leader has seen and declared that there can be no lasting peace but with victory; that business men, large and small, are rising to the occasion in a single purposeful sacrifice of self interest for the good of all. There is much indeed to be thankful for.

BUSINESS BUILDING

IN THESE days of sharp competition no elevator can depend on holding its trade unless it offers more than an open driveway to its customers. Price competition is less difficult to meet than service competition and unless a dealer offers service and still more service he is going to fall behind in the business race. ¶ In the first place it is a notable fact that one can travel miles on any railroad and not see a single firm name on any of the elevators passed. This is less true of farmers' companies than of independent dealers, the farmers' houses usually advertise themselves well. ¶ Millions of dollars are spent yearly in successful advertising which is aimed only at publicity and to which no single business transaction can be attributed. Yet the total volume of business shows that the money is well spent. Make your name a household word in your community by having it conspicuously displayed on your house. In time the name will be associated with every suggestion of grain or elevator transaction and if the farmers of your community can be made to think your name in connection with his grain, then the work of deflecting his natural trail to your door will have to be done by the other fellow. You have the start of him by just as much publicity as you give your house. ¶ Publicity does not end with a painted name, however. The successful dealer is a leader in community affairs, he is associated in all progressive movements of his town, and judicious expenditures toward public benefit always returns many times over in increased business. A man known as a public

spirited citizen is also known as a good man to do business with. ¶ Personal service, however, is the great factor that grain dealers should cultivate. You have a telephone, does it work constantly in the interests of your customers? Opportunities frequently come to you to make advantageous purchases of things your customers need. Do you take advantage of them and give the customers the benefit of the saving? Numerous ways are constantly offered to be of service to farmers and their wives, and every such service, outside of the routine of business, adds to your bank account. ¶ Of course there is more to it than that. The man who has the habit of giving, has a broader outlook, a deeper sympathy and more friends than the other fellow, and these all make life richer, sweeter and more worth while. But on the ground of financial betterment alone—it pays.

EDITORIAL MENTION

Inland waterways are very slowly but surely coming into their own.

With cheaper corn and an efficiency program for feeding, it looks as if the palmy days for alfalfa were just beginning.

World safety cannot be attained without sacrifice. We are beginning to make the sacrifice, and safety is surely coming.

The foundation of success of many co-operative elevators has been the side lines handled. This works as well for individuals in most cases.

The fires in New York's water front will probably result in making that district a military zone. It is as important from the military standpoint as a front line trench.

The Wheat Export Company will no longer monopolize the wheat export business. Hereafter the firms who have always handled this business will do so under export regulation.

The discovery of several million bushels of oats and wheat in New York that were held in secret storage will relieve the coast situation if the Government decides to take over the stores, as seems likely.

Mr. Hoover says of the wheat price: "This price is not satisfactory to anyone. Consumers would like for it to be lower, producers would like for it to be higher." Most of us look at the price from a single angle. This statement gives a broader view.

The proposed 100-pound standard bale is not received with much enthusiasm. Many balers could not handle so small a bale, and the matter of standardizing the weight would necessitate more machinery with increased cost of, perhaps, \$1 per bale.

When the big car shortage appears and elevators become choked with grain waiting transportation, the 30-day storage limit will probably be dealt with leniently, but for your own protection don't fail to take the matter up with

the Grain Corporation and get permission. You will not be penalized, but it will save trouble and may result in better car service.

Grain shippers will have to keep in touch with embargo orders, or a lot of grain is going to be lost by heating in cars that are held up. The latest order is the New York Central's embargo on all domestic shipments of grain billed east of Buffalo, Cleveland and Clearfield.

Farmers co-operative elevators that are operated on the mutual plan are exempt from the 30-day storage provision of the Food Law. But most so-called co-operative elevators are merely stock companies and come within the law. So far as wheat is concerned, if the price is fixed for the year, it won't do them any good if they do hold it.

The great terminal elevators in Canada make no charge for cleaning grain, as the screenings more than pay for the service. This holds just as true of the country elevator. It would cost him nothing besides in many cases raising the grade of his grain by lowering moisture and insuring against heating from dirt pockets and broken grain. The loss in volume is more than made up in quality and the sale of feed screenings.

M. H. Houser, representative of the Grain Corporation in the Pacific Northwest, is quoted as saying that the Corporation "will not buy wheat where the grade has been altered by cleaning. We want the wheat just as it comes from the country and not otherwise." As no explanation is given as to just what Mr. Houser meant by "cleaning," his quoted remark, if correct, is difficult to explain. One thing can be certain, he did not mean that grain should not be run through a separator at the country station. This does not change the grade except as moisture is lost in the process, and it saves the shipper the freight on his screenings and their feed value.

The shipment of Australian wheat to this country is being interpreted in some quarters to mean that the pressing need in England and Europe is being relieved. Such is not the case. From New York to Plymouth is 3,006 miles. From Sydney, Australia to Plymouth by way of Cape Town is 11,463 miles, and by way of Panama, 12,206 miles. From Sydney to San Francisco is 6,511 miles. Besides the saving in mileage, a ship making four round trips between New York and Plymouth while making one from Australia, the New York route is well guarded from submarines, while vessels from the south have to be in the threatened zone a much longer period. The logical distribution of Australian wheat is to bring it to this country, releasing for export an equal amount of our own. However, for the protection of Western shippers there may have to be a tariff adjustment or a price agreement with Australia. That commonwealth has taken the duty off of wheat and wheat products so that their wheat can enter this country free, but the Australian price is lower than that set for American wheat, so that some adjustment seems to be called for.

A. R. TAYLOR
Milwaukee.

NEWS OF THE TERMINAL MARKETS

O. A. MULLALLY
St. Louis.

SELLER PAYS WAR TAX

The directors of the Peoria Board of Trade adopted the following resolution October 31: "Resolved, That on all grain or other commodities brought to arrive basis Peoria terms, the war revenue tax shall be paid by the seller."

ALLOWED THE BUYER

The Board of Directors of the Buffalo Corn Exchange recently adopted the following rule: "Resolved, That the 3 per cent war tax on freight shall be allowed the buyer on all sales of spot grain carrying regular billing on basis Buffalo freight allowed."

OWNER MUST PAY TAX

The Directors of the Chicago Board of Trade made a ruling recently that the war revenue tax on inbound freight, switching or other charges made by the railroads on grain and seeds consigned to this market should be paid by the owner. They also ruled that on all grain or other commodities bought "to arrive" basis Chicago terms, the tax shall be paid by the seller.

NOVEMBER CORN RECEIPTS

Corn crop is record breaker, but several weeks late. Price is very tempting, but cars are scarce. Quality below average. Farm reserves old corn smallest in recent years. Primary receipts this month have been less than half as large as last year when crop was short. Largest November receipts were three years ago when crop was trifle below average. December receipts are generally much larger. January usually leads.—C. A. King & Co., Toledo, Market Letter of November 10.

MARKET REPORTS ON GRAIN AND HAY

There are now in the field, representatives of the grain and hay division of the Bureau of Markets of the United States Department of Agriculture who will furnish the material by which the Bureau will issue semi-monthly market reports on grain and hay. The headquarters of the North Atlantic Division is New York, the Southeastern Division, Atlanta, Ga., the Southwestern Division, Oklahoma City, Okla. The various divisions are expected to be in operation soon.

CAUTION TO SHIPPERS

Southworth & Co. of Toledo, Ohio, say in late letter to shippers of corn: "We suggest you use extra care in buying corn. This new corn requires careful sorting. All soft corn should be discarded and sent back for hog breakfast food. A little caution and care in buying will prevent disappointment later over low grading."

"Corn quality probably higher now than when Government report gathered. Weather has favored. Later husking returns may be more optimistic. But—the soft corn quantity is very large."

RULES GOVERNING CORN TRADE

The Directors of the Kansas City Board of Trade recently adopted the following resolutions governing transactions in corn for future delivery:

Resolved, that effective Oct. 26, 1917, the restriction upon purchases of corn for May, 1918, delivery, imposed by resolution of Aug. 9, 1917, be and hereby is removed. The maximum price of \$1.28 imposed by resolution of July 12, 1917, shall continue in effect; be it also

Resolved, that buying and selling of corn for January, 1918, delivery be also permitted, subject to the maxi-

mum price of \$1.28 per bushel; and also be it further Resolved, that any member trading in violation of the foregoing shall be deemed to have committed an offense against the good name of the Association.

HARRY C. AVERY

There may be those who, through environment or other unfortunate circumstance, have never given, even perchance never heard, the yell of the Chicago Board of Trade Indians. Here it is: "Tee Hee! Ta Ha! Ta Ha Ha! Chicago! Chicago! Raw, Raw, Raw! Want Any Ice Today! No! Gidap!" These words, if properly given, are pronounced loudly, boldly and with energy. Only those have heard them in their native, perfect state of frantic, declamatory enunciation, who have attended



HARRY C. AVERY

some Chicago day football or baseball event and attuned their ears to the ensemble rendered by the Chicago Board of Trade Indians. The chief of the Indians is Harry C. Avery.

Mr. Avery is clubman, sportsman, good fellow and popular Board of Trade member who knows more about the Board of Trade from the proscenium box with the calcium lights turned on than most individuals. He knows that the audience always gets a good bit of its information from the "aside" of the principal actor, and consequently lends a serious ear to the telepathic messages, constantly and uniformly vibrating from all the ramifications and underlying impulses that are part of the daily life of the Board of Trade. In his official capacity on the Board he is censor, and assistant to the Market Report Committee. This committee, among its duties, governs the Board of Trade Quotation Service, passes upon the eligibility of solicitors and has charge of all the Board statistics.

Mr. Avery was born in Hudson, N. Y., in 1859, remaining at his birthplace until 15 years of age when he removed to Chicago, engaging with Norton Son & Co. He was later successively with Lyon, Lester & Co., Robt. Warren & Co., J. H. Milne & Co., H. O. Kenyon & Co., until 1882, when he became manager for Milmine, Bodman & Co.

In 1885 he started into business for himself which

he left in 1892 to become manager of the grain department of Counselman & Day. He remained with that firm until 1900 when he went into business again on his own account until 1911, since which time he has been connected in an official capacity with the Board of Trade.

Mr. Avery was formerly captain of the Farragut Boat Club of Chicago, Union Boat Club, Ogden Boat Club, and served at one time as secretary of the Mississippi Amateur Rowing Association. He was a Commodore of the Chicago Navy, and Lieutenant in Company K, 1st Regiment I. N. G. at the time when it was composed entirely of Board of Trade members. He is a prominent member of the Masonic Order being a Past Commander Chevalier Bayard Commandery No. 52.

Not to know Harry Avery is to profess ignorance in grain trade affairs whether you are on the Chicago, Buffalo, Baltimore or other marts of trade. To be engaged in the grain trade from 15 to 58 years of age is a long carry. One gains in that time acquaintance, knowledge and experience. All these various acquisitions Mr. Avery now devotes to the service of the Chicago Board of Trade and, such is his versatility, is equally at home with the Board of Trade Indians, or in the serious conduct of his duties for the Board for which a lifetime of work has fitted him.

BUY IT RIGHT

A recent letter of Pope & Eckhardt Company, Chicago, says:

"All lots of corn well taken here, except the heating and discolored were workable only at very large discounts, and not much competition for them at the comparatively low range; the better selections and fairly dry command very good prices. In normal years the movement is light ordinarily until late in November, so that with this late season and the damage by frost it should not be surprising that a big percentage of the movement at this time should carry such an exceptional amount of moisture. Many farmers don't care to risk its keeping qualities, and the dealers should buy it right."

COLD FACTS ABOUT CORN

"The cold facts as they appear to us disclose a very large assemblage of corn from the late harvest, a large per cent of which did not properly mature and will need artificial means to manufacture it into commercial or deliverable grades; that only a small per cent has been rendered by frost unfit for feeding or distilling purposes; that a large amount is unfit for cribbing and will be rushed to the terminal centers as fast as it can be loaded into cars; that an important arm of the Government has assured control of the rail distribution which means business; that the 300,000,000 bushels of soft corn will have preference and that it cannot fail to lower prices for all grades, especially should distillers fail of permission to revive the manufacture of high-wines; that the South is willing and anxious to sell her 120,000,000 exportable excess in the North, and that there is no fear of congestion in any futures under the liberal delivery rules.

"Against this is the theory of a famine in contract grain, an increased consumption, a possible failure in the transportation facilities, a probable demand for exports, a certain demand from Mexico and increased consumption of corn foods. It is left to the speculator which he will choose, the theories or

the facts for intelligent operations in this market."—*Crary-Johnson Company, Chicago, Letter of November 12.*

CONSIGNMENT TO FOOD ADMINISTRATION NOT MATERIAL

The following letter was sent November 1 by the Corn Exchange of Buffalo, N. Y., to all railroads entering Buffalo from the West:

"We beg to quote for your information, the following statement received from the office of the U. S. Food Administration, by Mr. Chas. Kennedy, 334 Chamber of Commerce, Buffalo:

"It has come to the notice of this office that railroads are willing to furnish cars for shipments of grain provided the grain is consigned to the Food Administration. We think the members of the Corn Exchange should notify their shippers that all wheat shipped to this market must be turned over to the Food Administration immediately on arrival, and that, therefore, the consignment in the first instance to the Food Administration is not material. Any special instances of difficulties of this nature should be reported without delay, in writing, to this office."

"If any such order is in force on your road, or any of your connecting roads, will you please take such action as may be necessary to have such orders withdrawn?"

OATS AT NEW YORK

The L. W. Forbell & Co., New York, weekly letter, November 12, contains the following on oats:

"It is gratifying to note a decided increase in market activity, which has resulted in a larger amount of cash business transacted than for some weeks. Through additional tonnage furnished, exporters were able to purchase more freely, which had the effect of not only absorbing oats on which the storage came under the "30-day rule," but largely reduced the pressure that formerly existed. The local trade also became good buyers the latter part of the week, when the advancing tendency of the market forced dealers to replenish stocks that had become somewhat depleted. Interior movement is necessarily limited by reason of the growing shortage of cars and the demand for the same to move soft corn that farmers are trying to market. While spot values have shown an advance of 3 cents for the week, prices are still somewhat below a Western parity, though with indications of further improvement which may ultimately carry them to a premium."

MAKE WAY FOR OPTIMISM

"Patience and optimism will restore corn poundage," say E. W. Wagner & Co. of Chicago in their letter of November 12. "Corn-belt experience indicates final success. The late November corn situation concerns a low-quality crop, its harvesting and conditioning. Former guesses of 2,600 to 2,700 millions of merchantable corn have melted to estimates of around 2,200 millions, which compare with the 1913-16 four-year average of 2,130,000,000.

"This news enhances the value of oats and suggests little relief in ample corn receipts before December 15. Past three weeks have shown frost effects up in an aggravated way. Otherwise—the crop has experienced no conditioning weather of consequence, and the weather results of December and January may be an agreeable surprise.

"At the moment—the corn world compares the 1917 quality as below the low 1915 quality. The chance of large waste is considered positive. Yet—it is the experience of the grain trade that the 1915 crop proved one of the greatest surprises in corn history by filling consumptive gaps of every character. I advise the utmost optimism in collecting this corn crop. The surprise will be on the side of optimism."

CHANGES IN MEMBERSHIP

Baltimore.—A. H. Seth has been granted membership in the Chamber of Commerce and that of Willard Thomson has been transferred. Reported by Secretary Jas. B. Hessong.

Chicago.—New members on the Board of Trade are: John J. Fennelly, Jos. P. Kelso, Wm. H. Holmes, Jas. P. Hayes, Chas. R. Schakelton, D. C. Bishop, E. H. Reynolds, R. S. Sinclair, A. H. Lam-

born, Chas. E. Laib and Geo. H. Phillips. The following memberships have been transferred: F. G. Crowell, Est. of J. C. F. Merrill, O. C. Wetmore, Est. of F. J. Martin, Thos. Fay, John H. Elker, H. A. Shively, Est. of S. E. Sinclair, C. M. Martin, Est. of J. J. Murphy, and Est. of Geo. H. Phillips. Reported by Acting Secretary W. M. Blowney.

Kansas City.—Fred R. Warrick was admitted to the Board of Trade on transfer of Harry Harris and F. W. Hipple on that of T. K. Miller. Reported by Secretary E. D. Bigelow.

Milwaukee.—Arthur Teweles, C. E. McDonald and Fred W. Aishton were elected to membership in the Chamber of Commerce. The memberships of L. Teweles, deceased, Lawrence C. Cressey and James A. Butler have been transferred. Reported by Secretary H. A. Plumb.

Pittsburgh, Pa.—Jas. A. Carson, connected with D. G. Stewart, was elected to membership in the Grain & Hay Exchange. Reported by C. G. Burson, superintendent.

JAMES McINTOSH ADAM

Announcement was made in these columns in the spring, of the enlistment in the United States army of James McIntosh Adam, son of J. U. Adam of the cash grain department of Rosenbaum Brothers of Chicago. Young Adam, who is 19 years of



JAMES McINTOSH ADAM

age, is now a corporal in the Ninth Company Artillery Battalion of the U. S. Marines in Virginia. He holds a medal for marksmanship and is only waiting for his company to be called across the sea to put his skill into effect against the Kaiser's bloody band of pirates.

TERMINAL NOTES

Omaha Grain Exchange members subscribed \$220,000 to the Second Liberty Loan.

The H. R. Scott Grain Company, Ltd., of Calgary, Alberta, has been incorporated with capital stock of \$10,000.

Members of the Los Angeles Grain Exchange, Los Angeles, Cal., subscribed a total of \$285,000 for the Second Liberty Loan.

Articles of incorporation have been filed by the Farmers' Club Grain Company of Winnipeg, Man. Capital stock is \$100,000.

The subscriptions of the Grain Board of the Boston Chamber of Commerce to the Second Liberty Loan amounted to \$2,182,400.

M. M. Day of Simons, Day & Co., Chicago, Ill., was a visitor on the Peoria Board of Trade, Peoria, Ill., early in November.

The Western Milling & Export Company, Ltd., has been formed at Winnipeg, Man., to engage in buying flour from mills in Western Canada and for sale for export overseas. The officers of the new

company are all associated with the Norris Commission Company and Norris Grain Company, Ltd. Capital stock is \$100,000.

The Mason-Hawpe Grain Company has moved its St. Louis office from the Pierce Building to the first floor of the Merchants' Exchange Building.

James Thomas, recently in the grain brokerage business at New Orleans, La., is now representing on that market Paul Klopstock & Co., of New York City.

Sam Finney, manager of the Cash Grain Department of E. Lowitz & Co., Chicago, was a visitor in early November on a number of Eastern grain exchanges.

Earl Skidmore of the Brouse-Skidmore Grain Company, Cincinnati, Ohio, finished a 3-weeks' trip through Illinois, Indiana and Ohio early in November.

The Milwaukee Grain Commission Company of Milwaukee, Wis., has been incorporated with capital stock of \$25,000 by P. C. Kamm, G. W. Kruse and C. C. Kamm.

Wm. T. Snyder, youngest son of John W. Snyder, the well-known grain man of Baltimore, Md., was married recently to Miss Elsa Schneidereith of Forest Park, Md.

The Duluth Board of Trade has established future trading in rye. Contract grade is No. 2 rye. The first transaction was made late in October at \$1.76 for November delivery.

George H. Phillips, son of the late George H. Phillips who earned the title of "corn king" a few years ago, has been elected to membership in the Chicago Board of Trade.

The first car of new corn for the Chicago market arrived October 24, consigned to Pope & Eckhardt Company. Its moisture content was 36 per cent and it sold for \$1.50 per bushel.

The Banner Grain Company of Minneapolis, Minn., is making arrangements to build a cereal mill on the St. Paul railroad right of way at Forty-sixth Street East, Minneapolis.

Harlan N. Monroe, son of Herman F. Monroe of the grain firm of Williams & Monroe, Louisville, Ky., is now with the Second Field Hospital Corps, stationed at Hattiesburg, Miss.

The Milwaukee Chamber of Commerce, Milwaukee, Wis., has ready to unfurl over the front entrance of its building at Broadway and Michigan Street a service flag containing more than 100 stars.

Philip A. Stephens, formerly in the grain business at St. Louis, Mo., and more recently located in New York City, has returned to St. Louis, where it is reported he will again engage in the grain business.

The Gould Grain Company of Minneapolis, Minn., has been experiencing of late a good demand for its barley flour. The company's mill which has been in operation about three years has a capacity of 350 barrels daily.

P. P. Donahue and Harry M. Stratton of the Donahue-Stratton Company, Milwaukee, Wis., with J. G. Martin have formed a company to establish a sheep ranch near Manitowoc, Wis. The capital stock is \$50,000.

Edw. A. Smith has resigned his position of manager for the Union Grain & Hay Company of Cincinnati, Ohio, to engage in the grain and hay business with Max Blumenthal on the Cincinnati Grain & Hay Exchange.

Chicago grain merchants purchased \$1,137,300 of the Second Liberty Loan bonds. Among the largest single subscriptions was one of \$125,000 by Armour Grain Company and one of \$250,000 by the Hales & Edwards Company.

Logan M. Baxter, manager for Lowell Hoit & Co., Chicago, on the St. Louis Merchants' Exchange, has just fitted up new well appointed offices on the first floor of the Merchants' Exchange Building, into which he has moved.

The War Industries Board of the Council of National Defense has arranged, through the War Department, for part of 1,000,000-elevator capacity of the East Side Iron Elevator at Toledo, Ohio. It will

be used by the Government for the storage of oats during the war.

News was recently received of the safe arrival in France of Charles Wehman, son of H. Wehman of the International Sugar Feed Company, Minneapolis, Minn. Mr. Wehman is a member of the Fifty-Sixth Aero Squadron.

H. Wallace Applegate, manager for W. A. Rundell & Co., Toledo, Ohio, for a number of years past, has resigned to go with the Milling Division of the United States Food Administration, to look after the export business and rates.

The Klosterman-Patton Grain Company of St. Louis, Mo., has been incorporated with a capital stock of \$15,000. Incorporators are Wm. J. Klosterman, R. P. Atwood and K. Kronsbein of St. Louis and M. M. Patton of Des Moines, Iowa.

Eugene H. Beer of Chas. England & Co., Baltimore, Md., entertained a number of his grain and railroad friends at an oyster roast on November 8 at his country home, Edgewood Shore, located on Bear Creek, a short ride by automobile from the city.

The Milwaukee Chamber of Commerce recently amended its rules to provide for the establishment of a "to arrive" market and the Board of Directors were authorized to remit the annual dues of any member while in the military service of the United States.

Jack Patten, son of James A. Patten, of Bartlett, Frazier Company, Chicago, Ill., was recently awarded the French war medal for bravery. Young Patten's act of bravery consisted in removing wounded soldiers under shell fire at Hill 304, near Verdun.

Among recent new Canadian incorporations are the Stevens Grain Company, Ltd., with capital stock of \$100,000; Anderson Grain Company, Ltd., with capital stock of \$10,000; B. C. Parker-Stevens Grain Company, Ltd., with a capital stock of \$100,000.

Edward Hymers, formerly with Pope & Eckhardt Company, Chicago, and recently in business on his own account, has taken charge of the receiving end of the cash grain department of Jackson Bros. & Co., Chicago. Offices are in the Postal Telegraph Building.

The offices of E. W. Wagner & Co. at New York are now permanently located at No. 33 New Street, where C. A. Johnson has everything fitted out for their Eastern customers' convenience. The *Wagner Evening Financial Letter* is now written from the New York office and published simultaneously from New York and Chicago.

John B. Turner of Memphis, Tenn., who was expelled from the Chicago Board of Trade several months ago has lost the suit which he started to enjoin the Board of Trade from expelling him. The case, after the Circuit Court and the Appellate Court had decided against him, was carried by him to the United States Supreme Court where the lower courts were sustained.

The McGaw-Dwyer, Ltd., of Winnipeg, Manitoba, have taken over the business of the McGaw Grain Company and Lumsden Elevator Companies. Officers of the new company are W. E. McGaw, president and general manager; W. H. Dwyer, Ottawa, vice-president; W. T. Barker, treasurer; O. Ritz, secretary. Directors are, including the officers: H. D. Dwyer, J. De Lamater, Henry Ritz, and J. J. Stevenson.

E. D. McDougal, vice-president of the Armour Grain Company, Chicago, has one son in France acting as surgeon's assistant. He is a member of Post Graduate Hospital Unit No. 8, New York City. Mr. McDougal's other son is an honor man at Fort Sheridan, First Officers Camp, and given a commission in the regular army. He is now at Fort Sam Houston, San Antonio, Texas, and expects to go to France at any moment.

Kerr, Gifford & Co., of Portland, Ore., have taken over the business of the North Pacific Grain Company of Seattle, Wash., and incorporated under the style of Kerr, Gifford & Co., Inc. Officers of the company are Peter Kerr, president; H. H. Rasmus-

sen, vice-president and general manager; N. A. Leach, assistant manager. The new firm takes over all the district and country offices of the old firm and also the Kerr, Gifford & Co. dock and grain cleaning plant at Baltimore, Md., as well as its export business. The headquarters of the firm are in the Lewis Building, Portland, Ore.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at leading terminal markets in the United States for the month of October, 1917

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	1,704,363	3,124,156	1,540,813	2,604,356
Corn, bus....	137,845	1,286,957	347,589	1,224,709
Oats, bus....	2,430,677	2,322,441	2,984,158	2,670,521
Barley, bus..	1,250	13,688	.....	54,168
Rye, bus....	2,064,347	1,935,522	1,513,012	1,591,353
Hay, tons...	4,404	5,340	1,061	588
Flour, bbls...	281,594	277,918	.....	121,729

BUFFALO—Reported by the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	15,842,830	11,083,128	.....	.....
Corn, bus....	.....	1,407,353	.....	.....
Oats, bus....	100,000	811,938	.....	.....
Barley, bus..	2,343,416	1,770,363	.....	.....
Rye, bus....	851,000	449,500	.....	.....

CHICAGO—Reported by W. M. Blowney, acting secretary of the Board of Trade.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	2,505,000	6,623,000	1,375,000	5,604,000
Corn, bus....	3,183,000	5,445,000	1,427,000	6,422,000
Oats, bus....	13,726,000	17,861,000	9,208,000	10,502,000
Barley, bus..	2,813,000	4,172,000	730,000	888,000
Rye, bus....	640,000	727,000	496,000	581,000
Timothy seed, lbs.	5,172,000	5,631,000	2,816,000	5,363,000
Clover seed, lbs.	945,000	1,308,000	483,000	602,000
Other Grass seed, lbs....	3,430,000	4,220,000	764,000	1,340,000
Flax seed, bus.	114,000	158,000	2,000	.....
Broom Corn, lbs.	2,649,000	3,306,000	1,044,000	1,859,000
Hay, tons...	30,956	23,508	2,157	1,232
Flour, bbls...	879,000	864,000	671,000	814,000

CINCINNATI—Reported by C. R. Hebble, acting executive secretary of the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	871,122	6,780,057	828,455	477,334
Corn, bus....	444,629	694,388	160,756	169,935
Oats, bus....	756,857	541,803	765,647	280,426
Barley, bus..	345,746	223,595	3,352	3,006
Rye, bus....	86,091	34,430	85,372	8,845
Timothy seed, lbs.	3,555	18,725	7,111	8,908
Clover seed, lbs.	2,004	3,905	1,011	3,092
Other Grass seed, lbs....	18,575	22,374	10,709	15,499
Flax seed, bus. ....	.....	21	1	80
Broom Corn, lbs.	153,426	177,555	59,442	557,772
Hay, tons...	32,920	18,203	22,500	10,435
Flour, bbls...	192,702	156,083	129,382	107,638

CLEVELAND—Reported by D. F. Hurd, traffic commissioner of the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	84,000	40,000	.....	.....
Wheat, Lake, bus..	.....	.....	.....	.....
Rail, bus....	97,952	265,916	68,177	21,585
Corn, bus....	42,671	157,521	26,067	129,893
Oats, bus....	632,745	393,871	285,089	91,664
Barley, bus..	1,259	5,775	.....	.....
Rye, bus....	42,096	8,667	1,993	6,046
Hay, tons...	7,053	5,854	37	86
Flour, bbls...	111,062	121,353	9,090	10,470

DETROIT—Reported by M. S. Donovan, secretary of the Board of Trade.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	334,000	305,000	15,000	154,000
Corn, bus....	47,000	315,000	7,000	249,000
Oats, bus....	380,000	477,000	112,000	128,000
Rye, bus....	80,000	62,000	19,000	24,000
Flour, bbls...	26,000	27,000	31,000	36,000

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	4,368,610	4,986,397	4,128,044	2,110,940
Oats, bus....	154,020	610,122	86,828	306,401
Barley, bus..	1,683,871	2,108,913	1,949,697	1,424,485
Rye, bus....	959,454	583,054	574,664	568,436
Flax seed, bus.	271,615	966,088	307,482	309,004
Flour, bbls...	589,950	898,500	655,755	908,035
Flour, reserved, produced	117,465	127,260	.....	.....

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	356,000	306,000	166,000	113,000
Corn, bus....	559,000	935,000	145,000	269,000
Oats, bus....	1,877,000	744,000	893,000	309,000
Rye, bus....	54,000	31,000	24,000	18,000
Hay, cars....	270	199	.....	.....
Flour, bbls...	.....	.....	56,520	52,430

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	3,194,100	8,484,750	895,050	7,076,700
Corn, bus....	676,250	572,500	468,750	738,750
Oats, bus....	2,155,600	2,016,200	1,122,000	318,000
Barley, bus..	138,000	72,000	16,900	119,600
Rye, bus....	88,000	42,900	35,200	30,800
Kaffir, bus..	5,500	24,200	8,000	36,000
Bran, tons...	5,340	2,860	16,920	6,732
Flax seed, bus.	18,000	.....	10,000	1,000
Hay, tons...	43,464	28,608	16,920	6,732
Flour, bbls...	49,750	56,750	263,500	277,750

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	650,000	1,674,250	108,486	1,032,939
Corn, bus....	423,440	423,460	329,515	559,800
Oats, bus....	3,976,840	4,651,040	2,067,835	3,385,128
Barley, bus..	2,470,800	3,428,080	611,076	580,112
Rye, bus....	507,170	591,280	125,336	446,160
Timothy seed, lbs.	624,242	1,624,795	397,410	63,958
Clover seed, lbs.	1,408,332	672,086	32,050	56,904
Flax seed, bus.	55,650	31,200	.....	.....
Hay, tons...	1,656	1,718	444	1,092
Flour, bbls...	103,060	217,150	116,179	249,322

MINNEAPOLIS—Reported by E. P. Kehoe, statistician of the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	14,675,620	15,519,520	2,946,240	3,696,080
Corn, bus....	80,920	278,280	82,580	167,720
Oats, bus....	5,458,620	4,797,050	4,208,810	3,568,030
Barley, bus..	4,853,960	4,583,890	3,618,570	3,498,860
Rye, bus....	2,054,340	1,473,470	753,180	814,920
Flax seed, bus.	979,600	2,380,410	76,920	299,100
Hay, tons...	4,263	4,347	228	372
Flour, bbls...	77,996	64,430	2,054,312	1,749,801

NEW YORK CITY—Reported by H. Heinzer, statistician, of the Produce Exchange.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	5,470,800	.....	3,148,777	.....
Corn, bus....	162,400	.....	42,245	.....
Oats, bus....	3,422,000	.....	1,670,406	.....
Barley, bus..	768,850	.....	1,174,383	.....
Rye, bus....	846,950	.....	446,776	.....
Timothy seed, lbs. ....	.....	.....	1,068	.....
Clover s'd, lbs.	5,103	.....	2,728	.....
Other grass seed, lbs....	.....	.....	.....	.....
Flax s'd, bus.	23,400	.....	.....	.....
Hay, tons...	18,383	.....	1,070 bales	.....
Flour, bbls...	679,033	.....	327,623	.....

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	1,570,800	818,400	4,528,000	3,928,800
Corn, bus....	1,453,200	1,271,200	502,800	376,200
Oats, bus....	342,200	281,600	2,240,600	1,883,000
Barley, bus..	354,600	252,800	208,600	119,000
Rye, bus....	184,800	141,900	262,900	121,000

PHILADELPHIA—Reported by A. B. Clemmer, secretary of the Commercial Exchange.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	2,394,441	2,761,539	1,875,119	2,024,879
Corn, bus....	94,174	376,884	168,797	303,210
Oats, bus....	3,085,555	1,663,425	2,763,909	1,316,095
Barley, bus..	52,000	.....	.....	.....
Rye, bus....	408,648	6,708	426,515	16,957
Flour, bbls...	144,420	154,629	.....	37,170

*Not available.

PORTLAND, MAINE—Reported by Geo. F. Feeney, traffic manager of the Chamber of Commerce.

	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	1,193,293	645,039	211,500	342,345
Barley, bus..	.....	551	.....	.....

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange.

of the Merchants' Exchange.	Receipts		Shipments	
	1917	1916	1917	1916
Wheat, bus..	1,492,041	4,354,821	1,382,650	3,479,780
Corn, bus....	885,470	726,685	377,360	351,360
Oats, bus....	2,541,500	2,301,800	2,513,290	1,731,460
Barley, bus..	386,000	491,200	10,600	16,260
Rye, bus....	81,610	67,200	22,730	51,930
Hay, tons...	19,886	14,885	8,660	4,750
Flour, bbls...	403,915	381,090	563,740	417,320

TRADE NOTES

The Strong-Scott Manufacturing Company of Minneapolis, Minn., manufacturers of general flour mill and grain elevator machinery, Morris Grain Driers, etc., has opened an office for the Pacific Coast trade at Spokane, Wash., in the Hutton Building.

An order for a 1,000-bushel Morris Grain Drier from the Powell & O'Rourke Grain Company of St. Louis, Mo., and for a 500-bushel drier from the Washburn-Crosby Company of Minneapolis, Minn., for its "C" Mill, has been placed with the Strong-Scott Manufacturing Company of Minneapolis, Minn.

The Kerosene Carburetor Company of Frankfort, Ind., has just moved into its own new brick two-story building at 311-313 North Columbia Street. In this building the company has installed \$15,000 worth of new machine tools and now has a capacity for turning out 150 carburetors a day. Five sizes of carburetors are made for stationary engines and one size for Ford cars.

A. H. Smith, who has acted as Michigan representative with headquarters at Jackson for the Huntley Manufacturing Company of Silver Creek, N. Y., for a number of years past, has been transferred to the Chicago office. He will have charge of the Central territory for the Huntley firm and will for the present represent the company in his old territory in Michigan and Wisconsin. The Chicago office is located at 315 South La Salle Street.

A device that commends itself to elevator owners by reason of intrinsic merits is the steel grain valve manufactured by Dan Morgan & Co. of Seymour, Ind. It is easy to install, is self-locking, and operating lever acts as indicator, always pointing in the direction valve is set, and can be operated at valve or by extra attachments from any floor in the elevator or mill. The manufacturers claim it is the only no leak, no stick steel grain valve on the market.

For very many years The Sykes Company of 930 West Nineteenth Place, Chicago, has been standard supplier to the grain trade of fire proof windows, all guages of corrugated iron, either painted or galvanized. The company also makes Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, metal ceilings, etc. Its large factory enables the company to fill all orders promptly and we are advised that no order is too large or too small to receive prompt attention.

We publish in this issue the advertisement of H. A. Brandenburg of Manitowoc, Wis., who makes a specialty of large structural painting. Among the elevators painted by Mr. Brandenburg are the 2,500,000 bushel elevators "A" and "B" at Manitowoc, owned by Bartlett, Frazier & Co.; elevators of the Northern Elevator Company at Manitowoc; elevators of E. Reineman at Reedsville, Wis.; elevator of Seyk Bros. at Kewanee, Wis.; large signs on Wm. Rahr's Sons Company's buildings at Manitowoc. Mr. Brandenburg has done a state wide business in this class of painting and will be glad to figure on your work.

The Buffalo Corn Exchange of Buffalo, N. Y., advertises for wheat in a page display announcement commencing with this issue. They state that the shipper will receive more for his wheat at Buffalo as prices are delivered New York, less export rate to New York. Buffalo backs up her statements by submitting the following: 1. There is no competitive market on a higher basis. 2. Your shipments will reach Buffalo in much less time than they would reach the seaboard, which means lower interest charges and smaller chances of deterioration. 3. No market has a lower commission rate than one cent per bushel, which is the charge in this market. 4. Buffalo is a large milling center, and is using a larger proportion of winter wheat than it ever did. Its present daily re-

quirements of winter wheat are 30,000 to 50,000 bushels. Its present daily total milling requirements are 150,000 to 200,000 bushels. Ascertain the export rate from your station to New York.

The Western Fire Appliance Works of 542 South Dearborn Street, Chicago, Ill., has increased its installations of Zeleny Thermometer Systems in grain elevators 100 per cent this year over last, equipping over 600 tanks since January 1. They report more recent installations as follows: Public Grain Elevator, New Orleans, La., 172 tanks; new Soo Line Elevator, Minneapolis, Minn., 30 tanks; Marfield Grain Company's new elevator at Minneapolis, Minn., 22 tanks; Maney Milling Company, Omaha, Neb., 18 tanks; Buchanan Elevator at St. Joseph, Mo., 16 tanks; Ballard & Ballard, Louisville, Ky., steel tanks; Independent Elevator at Omaha, Neb., 16 tanks.

The Cyclone Blow Pipe Company of 2542-52 Twenty-First Street, Chicago, Ill., calls attention to the saving demanded by the United States Government on all forms of food, and reiterates its statement that every country elevator having a grain cleaner should install the Cyclone Dust Collector. This system has been in service for years in both small and large grain elevators and especially in these times should the elevator owner use all legitimate measures to conserve his product. The Cyclone Company will install new dust collecting systems on modern plans or remodel the old system on modern lines and guaranteed as to quality of work done.

Do you divide the years of service into the cost of paint, plus the cost of labor? If so, you have the correct method of figuring the yearly cost of paint protection. If you have metal surfaces or any exposed surfaces, whether of metal or wood, to repaint, it will be worth your while to purchase Dixon's Silica-Graphite Paint because the longer service and better quality of Dixon's Paint are worth a great deal more than a few cents per gallon. The careful and cautious user of paint will appreciate this fact. For over 50 years the slogan and standard of the Dixon Company in the matter of paint has been "the best and one grade only." If anyone is looking for a low-priced paint and does not care about quality and long service, the Dixon Company has nothing for him; but if he desires quality and long service, Dixon's Silica-Graphite Paint is the best for him. The manufacturers are ready at all times to give detailed information, price and assistance in any way. Write the Joseph Dixon Crucible Company, Jersey City, N. J., and watch Dixon's house organ *Graphite* for long service records.

WELL KNOWN MACHINERY MAN
RETIRES

Point out to us the American grain dealer who is not acquainted, directly or indirectly, with that "prince of good fellows"—A. T. Sitterley.

After an unbroken connection of 33 years—from 1884 until 1917—with The S. Howes Company, Silver Creek, N. Y., and its predecessors, first as a traveler and latterly as director, Mr. Sitterley decided on November 1 to relinquish his duties as secretary of the corporation.

To mark the event, the directors of The S. Howes Company tendered him a farewell banquet at the Ellicott Club, Buffalo, N. Y., at which were present all the office staff and heads of the various departments of the "Eureka" works. At the close of the dinner, President A. C. Barbeau, in a few well chosen words, presented to the guest of the evening a gold watch and chain. The presentation over, the whole party adjourned to Shea's Theater. There is no doubt but that "A. T.," as he is

known to his intimates, will long cherish the memory of that occasion.

Mr. Sitterley is an optimist in the fullest sense of the word. He possesses that happy faculty of looking on the bright side of things. He has that gift "so rare among employers of today" of lightening the other fellow's burden. Never was he too busy to be approached. Mr. Sitterley's char-



A. T. SITTERLEY

acter has been summed up by one who has known him intimately for 25 years in the following verse:

If you have a kindness shown,
Pass it on!
'Twas not meant for you alone,
Pass it on!
Let it travel down the years,
Let it wipe another's tears,
Till in heaven the deed appears,
Pass it on!

Mr. Sitterley is a remarkably active man—physically fit and mentally alert. One would never imagine to look at him that his age was a trifle over the allotted "threescore and ten."

May our good friend Sitterley—Dean of the Grain Cleaning Machinery business—long live to enjoy the ample fruits of his labor.

ROPE DRIVE AND STEAM POWER

BY A. W. WILLIAMS.

"Yes, we're going back to rope drive and the isolated power plant when we complete our new elevator," remarked F. C. Dickson, of the Kentucky Public Elevator Company, Louisville, Ky., who explained to the writer that he was a firm believer in the rope drive in a big elevator, where there is an enormous strain.

Mr. Dickson called attention to the fact that the elevator operator has to have steam with which to operate his driers. He also has to have steam to operate his pumps, and in fact steam has to be kept up all the time to prevent fire in elevators which are not entirely of concrete construction, and even there when fire breaks out in grain.

Here is a plant that operates with a comparatively small force of from 45 to 60 men, but with this force has loaded 150 cars and unloaded 80 cars in a single day. All operations practically are handled by machinery, and the elevator companies use fewer men comparatively than almost any other one industry that can be named, that is in comparison with the work handled.

However, the load on the machinery is heavy at times, and is steady and consistent. Of course the work is nothing like as heavy as it was in the days when driers were unknown, and when it was necessary to keep grain moving from tank to tank all day when corn or oats decided to heat. At one

time 80,000 bushels of corn heated and the elevator crew was working all through Sunday and for several days to keep the grain moving, and the temperature down, steam pouring from the upper part of the plant in such quantities that it looked as though either the building was on fire, or a steam line had broken, and the fire department had some uninteresting runs to make, as there is always some excitable idiot who turns in an alarm, and examines later.

The big driers have simplified such matters greatly, but steam has to be kept up to operate such driers, and as the elevator man can generally buy coal as cheap as the central station operator, the expense is not much greater if it is as great. With the small elevator the electric system is probably much better, but with the big plant where stuff is being moved constantly the private steam plant has many advantages.

For one thing the elevator machinery carries a dead load, a load that has no give or that does not pick up momentum with revolutions. Grain buckets are constantly going up under load, and coming down empty, the result being that it is a steady load pulling one way, and calling on the machinery for power at all times. The rope drive bites into the sheave, there is very little slipping, and the drag is firm and steady, there being little or no friction. Again the plant needs steam for fire protection and emergencies at night, and if the plant is closed down in the evening with 40 or 60 pounds of steam, under banked fires, protection is afforded late into the night on steam that can not be considered a waste.

However, Mr. Dickson believes firmly in the rope or cable drive system for the larger mill, and believes that central station service, and motors can be used to great advantage as an auxiliary service in case of emergencies. The house operating its own electrical plant, and using individual motors, can swap over to central station service merely by throwing a switch in cases of emergency, and this is certainly an excellent system.

Objection is made to the individual motor system on two counts, one being that the workhouse is a very dusty place, and it is a hard matter to keep motors clean and running smoothly, even when boxed in with the closest of fastening doors, etc. Then when something goes wrong it probably stumps the plant electrician, and the motor expert is called in. This chap does a lot of examining and finally locates the trouble, after the plant has been tied up, probably while grain was hot and had to be moved in a hurry. A lot of time is lost, whereas a breakdown of any kind in an ordinary power plant is easy to locate, and unless it is unusually serious, it is a small matter to straighten out, and get things running again.

The high cost of coal has undoubtedly driven many mill operators to central station service within the past two years, not the cost so much as the inability to obtain the product in emergency periods. However, isolated power plants are steadily being decreased in number, and eventually the central station people will have things under control, and at a point where they can afford to jump prices. In such an event some of the mills will instantly go back to private power plants, but others who have put in other equipment, and which are crowded for space for power plant operations, will figure over things considerably before giving up their central station service.

In the case of the Kentucky company, which did not suffer any damage to speak of in the recent fire, to either its drier or to its power plant, it would really be expensive to give up its big engine and put in turbines for operating individual motors, or to put in motors for central station service, when the boilers, engines, etc., are ready to turn over at any time. All of the old pulleys, etc., were completely ruined in the fire, but the main drive shaft, and main pulley were uninjured, and it will merely mean installing new wheels through the plant, and new belting and rope drives. Under such conditions the isolated power plant probably has its advantages, but the trend of the times seems to be toward motor driven machinery.

NEWS LETTERS

MILWAUKEE
C. O. SKINROOD - CORRESPONDENT

THE Chamber of Commerce, always distinguished for its patriotic conduct, has taken on a new proposition, that of furnishing the 340th Regiment (Milwaukee's own regiment), with a fine silk banner. A campaign has been going on for some time to collect the necessary funds for this handsome gift. President H. W. Ladish of the Chamber has been taking great interest in this work. George A. Schroeder, traffic head of the Chamber's freight bureau, was named the chairman of the committee to collect the funds. The regiment of Wisconsin infantry is now at Camp Custer, Battle Creek, Mich., in training. Mr. Schroeder, or Mr. Ladish expects to make the speech of presentation.

* * *

Milwaukee mills and grain elevators are being closely guarded following a warning recently sent out from Washington that such protection is deemed imperative. Lights are being placed above all flour mills and grain elevators and private guards have been sworn in to protect these properties.

Grain men of Milwaukee have been elated at the prospects for further harbor improvements in this city. Provisions for a bond issue of \$500,000 for harbor improvement will be asked for in the city budget of 1918 by the Harbor Commission. The recent purchase of the south 1,500 feet of Jones Island, at the mouth of the harbor, by the city, was at a cost of approximately \$400,000. With the new funds the city will be in a position to go ahead with the actual building of Milwaukee's new harbor.

The first work to be done in the building of the harbor will be the building of a breakwater in the lake opposite the north end of Jones Island. The Harbor Commission will continue the breakwater southward. The space to the breakwater, about 600 feet out, will be filled in with the dredged earth. Part of the island will be dredged away in order to make room for the docks and to enlarge the Kinniskinnic Basin.

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Arthur Teweles and F. W. Aishton are among the members recently accepted by the Chamber of Commerce.

* * *

At the suggestion of President Wilson, the Milwaukee Chamber of Commerce is taking a deep interest in raising the recreation fund for the United States army camps. Letters have come for assistance to the following members of the Milwaukee Chamber: H. W. Ladish, H. H. Peterson, H. M. Stratton, H. A. Plumb, J. F. B. Buerger, F. J. Coughlin, W. A. Hottensen, P. C. Kamm, L. L. Runkel, Walter Stern, Hugo Stolley, A. R. Taylor and A. R. Templeton. These men and other grain men have been active in supporting the local work for the recreational camps.

* * *

Major Walter Stern, of Bernhard Stern & Sons, has received orders from the adjutant general at Washington to report for active duty as assistant to the depot quartermaster at Omaha, Neb.

* * *

The Milwaukee Chamber of Commerce is paying honor to those of its members who have joined some branch of the army service by having an im-

mense service flag made which will contain one star for each of the men working for the country. President H. W. Ladish says the list of such army and navy men is now being compiled and that it runs well up into the hundreds.

* * *

Grain men of Milwaukee declare that not only will they buy flags for their Wisconsin regiments, hang out service flags and otherwise co-operate with the Government, but they will also use larger sums to buy Liberty Bonds. In the first sale of Liberty Bonds, \$160,000 was reported from Chamber of Commerce interests. In the Second Liberty Loan no less than \$750,000 was subscribed by the Chamber members and allied interests, and the members say they will be ready to help in the next and in all other Liberty Bond sales that may be held by the United States Government. A committee was named which worked most diligently to bring the last Liberty Loan before the favorable attention of all members.

* * *

Another distinction which the Chamber of Commerce gives all of its members who have joined any branch of the service is that of posting their names on the floor in a roll of honor. All members of the immediate families of members will be listed on this board from time to time as they join the national colors.

* * *

Allen Rankin, aged 26, son of M. G. Rankin, one of the prominent grain men of Milwaukee, has enlisted in the American Aviation Corps and is now in France ready for active duties. In a letter Mr. Rankin tells of a U-boat attack on the vessel of which this fleet was a part, carrying American troops. The family knew nothing of young Rankin's going to France until the arrival of this letter.

* * *

The Chamber of Commerce has passed an order that all of those connected with any branch of the military service will not be required to pay their dues as long as the war lasts.

* * *

An average of 24 bushels of corn per acre for Wisconsin and a total production of 43,000,000 bushels is the latest November crop report for the state. This is a reduction of scores of millions of bushels from the average corn yield in this state. Corn grown for the grain was almost a total failure in the upper counties of the state, while less than 25 per cent of the crop in the southern part of the state was ripe when the killing frosts came. It is estimated that 51 per cent of the total crop of the state was cut for silage. Only a small amount of the corn raised in the state will be merchantable this year.

* * *

The effect of the lack of cars and other influences has been clearly shown by the record of Milwaukee grain receipts for the last 10 months ending with November 1. In some lines there have been larger receipts than a year ago for this 10 months' period and in other grains there has been less trade. Milwaukee has been growing as a wheat center, receipts for the 10 months of 1917 being 6,321,000 bushels, compared with 6,200,000 bushels a year ago. This indicates a small gain.

There has been a gain in the corn trade in 10 months of no less than 1,000,000 bushels, Milwaukee receipts for 1917 being 9,760,000 bushels and for 1916 8,580,000 bushels. A slump of some proportions is noted in the oats trade, the receipts for the 10 months of 1917 being just 22,322,000 bushels compared with 34,521,000 bushels a year ago. This represents a decline of about 12,000,000 bushels and is partly due to the fact that 1916 was an extraordinary year for oats, while the oats crop of 1917

in the territory contiguous to Milwaukee was only fair.

Barley trade has also receded, the total receipts for the 10 months of 1917 being 12,833,000 bushels compared with 17,867,000 bushels for the corresponding period of 1916. This represents a decline of practically 5,000,000 bushels in barley.

Rye receipts of Milwaukee in 10 months have dropped from 1,569,000 bushels compared with 2,645,000 bushels a year ago. This means a drop of about 1,000,000 bushels compared with a year ago.

These figures indicate that wheat and corn trade has increased in the last 10 months while the receipts of oats, barley and rye have declined considerably. With gains of about 1,000,000 bushels in some grains and with a slump of 18,000,000 bushels in other grains, approximately, there has been a net falling off in grain trade for 10 months of about 17,000,000 bushels.

Various reasons are assigned for this decline in grain trade. One of the most important is the scarcity of cars. Another reason given by grain leaders of the city is that farmers have been reluctant to part with their grain, expecting that prices are going up later. Still another reason is that grain crops for 1917 were not as good in some respects as the large crops of a year ago, when abnormal yields were experienced in some of the important grains.

ST. LOUIS

R. O. JOHNSON - CORRESPONDENT

THERE has been a lively trade in corn and oats on the Merchants Exchange, and one would think from the appearance of the pit at times that old-time trading in wheat was under full swing. As most of the professionals have been favoring the buying side of the market, they have made money, and of course would agree that conditions are highly satisfactory. Unless all signs fail active trading in corn and oats will continue throughout the winter, unless speculation and rising prices should force more stringent restrictions on future dealings than prevail at present. The trade is possessed with the idea that any runaway markets will result in abandonment of trading at Government direction until the war is over. Consequently there is a protest from all sides, and especially from the shorts, when the market shows pronounced strength and suggests that corn prices might soar rapidly to the maximum of \$1.28 recently established by the Board of Directors of the Exchange.

Best opinion is that the December option will surely expire at the maximum price, as the wide premium in the cash market and the small primary movement, in the face of small local stocks and good domestic demands, absolutely assure a cash market well over the \$1.28 level, and trades will have to be settled on that basis, as no deliveries can be made with corn at present high cash prices.

Grade of the new corn arrivals here is very poor, the same as in other markets, and ear corn has been selling at a remarkable discount on the tables, owing to the lack of shellers and dryers to handle the shipments.

Cash houses were pleased to see buying suspended by the Wheat Export Company, and export business permitted on the old basis of competitive buying. This market has been adversely influenced ever since the Export Company started buying for the Allies, and many houses that previously did a large export business, found their trade practically eliminated. These firms now expect an improvement in the buying here for foreign shipment, and for this reason look for active cash grain dealings throughout the winter.

With the St. Louis Merchants Exchange caucus and election a little over a month away, the ques-

tion of officers and directors for the next year is beginning to be discussed in grain and milling circles. It is unlikely that any independent ticket will be in the field, and if not this will assure the election to the presidency of E. C. Andrews of the Kehlror Flour Mills. Mr. Andrews now is first vice-president, and under an unwritten rule of the Exchange the first vice-president succeeds to the presidency. Only on one or two occasions has this rule been broken. It is also in line with this rule that Charles L. Niemeier, now second vice-president, will succeed to the office of first vice-president, and this will leave the selection of a second vice-president as the main factor in the election. Up to the present time Louis A. Valier of Valier & Spies Milling Company, is most prominently mentioned for the office; but there will, no doubt, be several candidates voted for the position. J. O. Ballard, the retiring president, of course, will become an honorary member of the Board of Directors, as has been the custom of the Exchange for many years.

Stephan A. Bemis, one of the founders of the Bemis Bro. Bag Company, was on the Merchants Exchange recently, and received a hearty welcome from his many friends. Mr. Bemis, who now is above 80 years of age, has been making his home in California for some time.

James T. Bradshaw, grain warehouse commissioner of Missouri, has notified Secretary Eugene Smith of the Merchants Exchange that after December 1 receivers of grain will be charged by the State Weighing Department 50 cents per car "in-weighing" fees at all public elevators in the state, which will be an increase of 10 cents per car over the present fee.

The plans of the Government to develop trade on the Mississippi River are meeting with active support by Merchants Exchange interests, as it is generally believed that the trade in grain both with Southern and Northern cities should be much larger via the river than it is at present. President J. O. Ballard, of the Merchants Exchange, recently urged members to give the movement for better traffic their heartiest support. His speech was in line with the visit of Secretary of Commerce Redfield's visit here. Mr. Redfield officiated at the opening of through Mississippi traffic in iron ore and coal between St. Louis and St. Paul.

According to Secretary Eugene Smith of the Merchants Exchange, grain men and millers of St. Louis have subscribed to more than \$250,000 in Liberty Bonds, have raised more than \$25,000 for the Red Cross fund, and have responded most generously to other charities made necessary by the war. Some members of the Exchange not only subscribed goodly amounts to the Red Cross fund, but pledged themselves to give \$50 a week to the organization for a period of 3 years. There is every reason why the Merchants Exchange should be proud of the patriotic showing that has been made by its members.

Old corn is quoted here at above \$2 for best grades of white and just below \$2 for yellow. The quotations on new corn are about 30 cents lower.

A car of choice alfalfa meal received here recently by the Graham & Martin Grain Company, sold for \$36, the highest price known in this market. Alfalfa dealers generally report a scarcity of supplies, and orders in the market that can not be filled.

P. P. Connor, who for years was head of the grain firm of that name on the Merchants Exchange, is now connected with the Food Administration in a traveling capacity. After a trip recently Mr. Connor stated that farmers were marketing their grain more freely in Missouri following the request by the Government that supplies be sold as soon as possible.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

THE Traffic Department of the Louisville Board of Trade at the suggestion of the Louisville Sub-Committee on Car Service, has adopted a schedule under which the minimum carload of oats has been raised from 24,000 or 32,000 pounds, to 1,500 bushels, of 48,000 pounds. It is claimed that this new loading ruling will release from 25 to 35 per cent of such cars for other purposes.

The usual fall car shortage is beginning to be noticeable, and it is said that it is only a matter of a short time before the traffic situation will be as serious as it was last fall. The first embargo of the season was placed in the latter part of October, when the Southern Railroad, placed an embargo on freight moving from the South to the North and East through Louisville and Cincinnati.

Arrangements have about been completed between the Louisville Industrial Foundation, the million dollar factory getter of Louisville, and a group of Peoria, Ill., grain men, for the erection in Louisville of a large cereal plant, to be erected in the central part of the shipping district.

Richard Van Dyke Norman, formerly well-known in Louisville grain circles, and member of the state legislature in 1896, recently died of gangrene, which set in from injuries received in a fall. Mr. Norman was nearly 70 years of age.

It is reported that the Interstate Commerce Commission may shortly prove the ownership of the Louisville & Cincinnati Packet Company, it being alleged that the Louisville & Nashville controls the property. For several months the river steamers have been handling very little freight, the large boats having been laid up, although good boating stages made it possible to operate them. The packet companies claim that traffic has been light, and that coal has been so high that only the small consumers of fuel have been operated. However, it is shown that traffic within the past few months has been abnormally heavy, and the authorities are likely to look for the "nigger in the woodpile."

A. W. Boysen, of St. Louis, representing the Food Administration, has been investigating mills and elevators in Kentucky, going first to Owensboro and then to Louisville, investigating the books and business. Mr. Boysen has called attention particularly to the matter of evading the law through over or undergrading wheat, and has stated that evasions would result in closing of such plants.

Isaac T. Rhea, of Nashville, Tenn., prominent grain dealer, and operator of the St. Louis & Tennessee River Packet Company, recently died in Nashville. He was taken ill in Chicago and started home immediately.

J. W. Newman, former Kentucky Commissioner of Agriculture, has been on a Government mission in the South, for several weeks. Mr. Newman is looking into the feasibility of growing larger crops of velvet beans, soy beans and peanuts in Florida, the Carolinas, Alabama and Mississippi, it being planned to use such materials to a greater extent as stock foods, thereby releasing more grain for other consumption.

Much interest has been shown in plans of Harvey Barnard, Food Administration agent at Indianapolis, who has been working on plan to use frost damaged grain in manufacturing grain alcohol, much grain having been damaged by the early frosts. Kentucky, Indiana, Illinois and Ohio distillers were recently called together for a confer-

ence upon the subject. Kentucky distillers rather favor the idea, as it has been shown that poor grain will make good alcohol, whereas good grain is essential in manufacturing cornmeal. In the old days of beverage whisky manufacturing only the very best grades of corn were used by the Kentucky distillers, but commercial alcohol is something else.

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A new grain and feed plant has been completed and placed in operation at Versailles, Ky., by Cleveland & Co., who have erected a modern brick building, equipped with elevating, cleaning and other machinery for handling grain and seeds.

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A new elevator may shortly be erected on the river front at Hickman, Ky., if a project of the N. C. & St. L. Railroad, is completed. The road is planning an elevator to be erected on piles, well out on the river front, and to be so located that it can be used for transferring grain between barge and cars. Much grain moves through the Hickman district by water, coming down the Ohio and Mississippi Rivers.

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The shortage of coal in this district is giving mill and elevator operators much trouble, and has even caused short suspensions in some cases. In this connection S. Thruston Ballard, of the Ballard & Ballard Company, was recently called to Covington, Ky., to give testimony in receivership proceedings against the Federal Coal Company, which has failed to observe contracts made with customers. Mr. Ballard testified that the company contracted with his mills to deliver six cars of coal per week, but upon finding a better market when prices advanced, the coal company delivered its output elsewhere, instead of performing its contract obligations.

* * *

The new plant of the Lack-Redford Elevator Company, at Paducah, Ky., has been nearly completed, and will shortly be ready to place in operation. While the plant is not of any great size, it is said to be one of the best equipped small plants in the state.

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Elevator operators are expecting to have much trouble with damp corn this year due to late corn being caught by the frosts and cut before it was ripe. It is alleged that about 10 per cent of the western Kentucky, river bottoms corn, was damaged by frost. This will mean much work for the drying departments.

* * *

The Newbern Grain Company, of Newbern, Tenn., has been organized to shell corn and do a general grain business. A charter has been applied for and orders placed for part of the required machinery. Hugh Scobey, of Newbern, has been made manager.

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Fire breaking out near the roof of the Farmers' & Merchants' Milling Company, at Ripley, Tenn., on October 15, destroyed the elevator and mill, the loss to building and grain being about \$40,000, with insurance of \$23,000. A quantity of wheat, seed wheat, flour and meal was destroyed.

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Due to the resignation of Percy L. Johnson, from the Louisville Board of Trade Directors, A. Brandeis, Louisville grain man, has been moved up from fourth vice-president to third vice-president.

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Under a new ruling that grain may not be stored for more than 30 days the Cogar Grain & Coal Company, of Harrodsburg, Ky., recently received instructions from the Federal authorities to clear its elevator. The company complied with the order, shipping most of its wheat South.

* * *

The Hay Committee, of the Louisville Board of Trade, through the Traffic Department, has laid resolutions before the local Committee on Car Service, under which the hay men offer to dispense with inspection of hay on team tracks, agreeing to handle the inspection in break up yards, if the rail-

roads will designate hay inspection tracks, which are accessible. This will relieve the carriers of much switching, and loss of time, and increase service considerably. It is understood that no demurrage will be paid until cars have been placed on such tracks, and the usual length of time has been given in which to make the inspection.

* * *

Joseph Leonard Hayes, son of D. E. Hayes, treasurer of the Ballard & Ballard Company, of Louisville, was killed at Fort Sill, Okla., at the Government aviation field in an accident on October 27. The body was brought to Louisville for interment. Young Hays was 22 years old, and a member of the Third Aero Squadron.

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The Interstate Commerce Commission on October 30, authorized the Central of Georgia and connecting lines to change rates within 30 days on grain to Louisville, Cincinnati, Memphis, and Nashville, approval being granted to the readjustments on the ground that it would bring about several substantial reductions and would tend to lessen discrimination in connection with long and short hauls.



GRAIN receipts at the port of Buffalo during the month of October were 19,137,246 bushels, an increase of almost 4,000,000 bushels over the corresponding month of last year but the total receipts for the season show a decrease of almost 33,000,000 as compared with the high record established in 1916 when 136,745,000 bushels of grain were unloaded in the terminal elevators along the waterfront.

All vessels arriving with grain from the Head of the Great Lakes were given good dispatch and although there was a scarcity of cars to move the grain to the Eastern Seaboard, the elevators were able to handle the cargoes as fast as they arrived. None of the elevators were rushed during the month and many houses only worked a few days each week.

Members of the Buffalo Corn Exchange predict a heavy movement during the month of November and during the early weeks of December because elevators at the head of the lakes will want to get as much grain as possible into Eastern elevators before the close of navigation. Receipts during the first 10 days of November were heavy but at no time was there a delay in handling the cargoes of the big carriers.

Very little grain is moving Eastward over the Erie Canal between Buffalo and tidewater points. Shipments via the state waterway during the season were only 745,000 bushels as compared with 5,502,000 bushels during the season of 1916, and 6,103,000 for the season of 1915. Practically all of the grain for export has been moved to Atlantic Coast ports by rail.

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Individuals and concerns engaged in the grain and elevator trade at this port were large subscribers of the Second Liberty Loan bonds. Many members of the Corn Exchange served on special campaign committees and the subscriptions of the grain interests helped to oversubscribe Buffalo's quota of \$55,000,000. The largest subscriptions among the elevator and grain men were: Superior Elevator Company, \$100,000; Nisbet Grammer, \$100,000; George E. Pierce of the Monarch, Evans and Wheeler Elevators, \$50,000; Spencer, Kellogg & Sons Co., Inc., \$230,000; Burns Grain Company, \$10,000; Henry T. Burns, \$5,000; Basil Burns, \$5,000; J. J. Rammacher, \$5,000; George Urban, \$25,000 and George Urban, Jr., \$25,000; Thornton & Chester Milling Company, \$50,000; Whitney-Eckstein Seed Company \$2,500; Niagara Falls Mill-

ing Company, \$50,000; Nowak Milling Company, \$25,000; Archer-Daniels Linseed Company, \$10,000; Henry G. Anderson, \$5,000; Armour Grain Company, \$5,000; Harvey Seed Company, \$1,000; Hewitt Rubber Company, \$100,000; J. G. Heinold Company, \$5,000; G. J. Meyer Malting Company, \$100,000.

* * *

The work of dredging the channel from the Buffalo River entrance to the dock of the Exchange Elevator has been completed and the channel is now open for large grain carriers. The channel has been only 85 feet wide and it is now 100 feet wide and deep enough to accommodate the largest grain boats.

* * *

A conference was held early in November in the Chamber of Commerce by grain merchants in the Buffalo market to outline recommendations to be made to the Interstate Commerce Commission at a hearing to be held in Washington later in the month. The hearing is for the purpose of re-opening the application made to railroads for permission to increase grain-shipping rates. Buffalo grain shippers are vitally interested in the proposed rate advance and Frank E. Williamson, traffic manager of the Chamber of Commerce, has been delegated to represent the Buffalo grain men. The Buffalo grain men will ask that rail rates on grain shipped east of Buffalo be fixed in fair proportion to rates from Chicago and other upper lake or rail points to Buffalo.

* * *

William J. Beier, Jr., who for the last 26 years has been engaged in the grain and feed business in the Buffalo market, has been re-elected a supervisor from his district. For many years Mr. Beier, Jr., has been a member of the Erie County Board of Supervisors and has been chairman of many important county committees. His re-election was a source of much gratification to the grain men affiliated with the Chamber of Commerce.

* * *

To prevent damage or destruction of grain elevators along the waterfront of Buffalo, Police Chief John Martin has placed Inspector Thomas J. Gilligan in charge of a large squad of patrolmen detailed along the water front. The police acted on the recommendation of Governor Whitman of New York, who had previously received a telegram from Herbert C. Hoover, who said there was a conspiracy afoot to damage grain in storage throughout the country. Fire houses in the waterfront districts have also been advised to be prepared for any great emergency.

* * *

Charles F. Strasmer, general manager of the Connecting Terminal R. R. Elevator sprang a surprise on the grain and elevator men at the last bowling contest of the V. E. T. Club by finishing with high score. C. H. Williamson took a spurt and finished second and Herman Keitsch and James A. Stevenson had an interesting duel for third place. The weekly bowling contests of the grain and elevator men have brought about keen competition among the boys of the V. E. T. Club.

* * *

A ruling from the commissioners of internal revenue has been received by Buffalo elevator operators saying that the 3 per cent transportation tax applies to transportation on lake bulk freighters plying between United States ports. This tax is payable not by the vessel but by the party who pays for the transportation but the vessel is charged with the duty of collecting the tax with her freight and accounting monthly to the Government. Bills of lading on shipments are also taxable.

* * *

The Erie Canal between Buffalo and Albany closed for the season at midnight, November 12. This is three days earlier than usual. This is due to necessary construction work planned in the western part of the state, particularly at Lockport and between Lockport and Rochester. The Champlain Canal, however, will not close until November 30, according to advices received by grain shippers from W. W. Wotherspoon, superintendent of public works at Albany.

Efforts are being made by elevator and grain interests to have the municipal authorities dredge the Buffalo River above the Ohio Street bridge so that it will accommodate the largest lake grain carriers. At a recent hearing before the City Council on this matter a number of grain men urged the river improvement, declaring it is absolutely necessary for the city to dredge the river because of the large investments in new elevator properties in this vicinity.

KANSAS CITY

B. S. BROWN - - CORRESPONDENT

BUSINESS is light for the firms and individuals connected with the Kansas City Board of Trade; restrictions on trade are many, and there are innumerable calls on the purses, and the energies of the members, in behalf of Government enterprises, or enterprises unofficially directed towards the support of the war. And the most patriotic and cordial spirit animates the entire membership at Kansas City.

"We are plunging into the support of the war with all our souls, disregarding the personal loss to us," said President Geo. S. Carkener. "We are first of all loyal citizens of the United States; and we are willing to make the sacrifices we are called upon to make, that all the people may suffer least from the trying conditions."

* * *

The Board of Trade demonstrated very practically its service to the Government, when \$500,000 of Liberty Bonds were taken in the Board Building alone. Many of the members also worked strenuously and long, on various committees that sold bonds in different parts of the business district. The Board closed at noon October 24, and a large delegation, carefully organized from among the members and employes of the members, constituted one of the most impressive sections of the great Liberty Loan parade.

* * *

The food conservation pledges received more signatures in the Board of Trade Building than there were members of firms and employes; the active committee that got signatures tackled everybody that was in the building at the time. A. D. Wright was designated by President Carkener of the Board to get the signatures of members and visitors on October 30, while others handled the offices.

* * *

Kansas City grain men are beginning to grow a little nervous over the distribution of wheat in the territory. Practically all is threshed, it is believed, but much is supposed to be still in farmers' bins. Nearly all the country elevators are full, some elevator managers have had to refuse to take more grain from growers who were rather pressing to get their grain off their hands. The car shortage is the chief factor in the holding of this grain in country elevators. Meanwhile, Kansas City elevators have scarcely half a million bushels of wheat. The danger of the situation lies in the possibility that bad roads may hamper the refilling of country elevators later; and the car shortage is not likely to be greatly improved when cold weather and consequent difficulties in handling trains, come.

* * *

The Roahen Grain Company received October 29 a car of oats containing 3,125 bushels, shipped from Mitchell, S. D. This is believed to be the largest car of oats ever received here—topping a car with 2,966 bushels received a few days previously by the Nicholson Grain Company.

* * *

The good work of W. S. Washer, president of the Atchison Board of Trade, assisted by C. H. Blanke of the Blair Elevator Company, succeeded in having Atchison made a terminal market. These two gentlemen visited the Kansas City office of the Food Administration Grain Corporation recently, and completed the arrangements. It is not be-

lieved that the proximity of the new terminal market will have any material effect, under the circumstances, on the Kansas City market.

* * *

E. M. Elkins, representative of the Simonds, Shields-Lonsdale Grain Company, at Wichita, has been appointed to the staff of the Food Administration Grain Corporation at Kansas City.

The Wheat Growers' Association, at a convention in Kansas City, Kan., October 17, protested against the price set by the Government for wheat, asked a reconsideration, and appointed a committee to visit Washington with the protest. The Association also suggested that the Government conscript farm hands from the cities for harvest, and that farmers in the National Army be given furloughs to help harvest the crop.

* * *

The prospects for Kansas wheat next year are still somewhat problematical. Many Kansas City grain men believe that Kansas has sown more than 10,000,000 acres. The greatest increase is in the eastern half of the state. In the western half, many fields are unsown, because weather conditions have not been propitious; moisture during November may yet encourage the farmers to sow. It is not believed that the labor situation has had an appreciable effect on the area planted.

* * *

The reality of the war was brought home to many at the Kansas City Board of Trade—if the presence of so many boys from the trade in France now were not enough—by a human interest touch in a relic from the front. Miss Marie Fitzsimmons, an employe of the Ragan Grain Company, received a pocket camera which her brother, William T. Fitzsimmons, had carried in France. He was killed in a German raid on a hospital, on September 4. The camera, damaged as if by a fragment of flying shell, and two pictures it contained when found, were shown to members by H. B. Ragan.

* * *

E. A. Sullivan, field representative of the Vander-slice-Lynds Grain Company, is surely always on the job. While laid up in a hospital in Topeka with blood poisoning, he sent a report of conditions in the eastern part of the state.

* * *

October showed a decline in the proportionate receipts of red wheat, and a gain in hard. The month had receipts of more than 3,000,000 bushels, some 5,000,000 less than in October, 1916, but nearly a million above September.

* * *

Corn of the new crop began arriving in Kansas City during October, mostly in the ear. Many elevators here are equipping to handle corn more extensively, installing shellers, and otherwise adapting their equipment. Many reports from the country indicate plentiful corn supplies for feeding, but the opinion among grain men is that a distressing proportion of the production is low grade.

* * *

The Board of Trade on October 25, through its Board of Directors, adopted a resolution that buying and selling of corn for January, 1918, delivery, be permitted subject to the maximum price of \$1.28 a bushel. The directors removed the restrictions, except as to maximum price, from purchases of May corn.

* * *

The Kansas City committee which visited Washington in October, for conferences on future trading with Mr. Hoover, consisted of Geo. S. Carkener, president of the Board of Trade; C. W. Lonsdale, George H. Davis and H. F. Hall.

* * *

R. T. Morrison, of the Norris Grain Company, who suffered injuries to his jaw while working with machinery on his farm in Bates County, is recovering.

* * *

The Kansas City Board of Trade will have on the walls of the trading floor, a framed "Roll of Honor" of the men who have left the grain business in Kansas City to go to war. The list is not yet complete—there may be some whose names must be added later; and the later drafts may take

some. The present list includes the following in addition to a long line of employes of grain firms:

H. Alfred Fowler, member of the Board, son of H. T. Fowler, captain, U. S. R. Signal Corps; Stuart Carkener II, son of Geo. S. Carkener (president of the Board of Trade, American Field Service in France; Clarence E. Fowler, son of H. T. Fowler, signal corps; Ebenezer S. Thresher, son of R. J. Thresher, aviation department, signal troops; Donald Moffatt, son of E. F. Moffatt, 1st U. S. Mounted Police. Duprey G. Warrick, son of F. R. Warrick, 9th aero squadron. F. R. Warrick, son of F. R. Warrick, captain, quartermaster service; Ford H. Davis, son of A. C. Davis, sergeant, 117th Ammunition Train.

CINCINNATI

K. C. GRAIN - - CORRESPONDENT

THE first serious fire in the grain trade in Cincinnati chargeable so far as can be ascertained, to German agents, occurred on October 21 at the hay-compressing plant operated for the Government by the Early & Daniel Company; and the work of the incendiaries was highly successful, as the total loss is estimated at \$100,000, of which probably \$75,000 represents the value of hay which was burned, while the balance is loss of valuable machinery used in the plant, as well as the building and other equipment. President Lee Early, of the Early & Daniel Company, stated shortly after the fire that in his opinion there was no doubt that the fire was of incendiary origin, which is to say, of course, that it was started by German agents, for the obvious purpose of destroying a large amount of forage for army horses, and thereby hampering the work of conducting the war. Mr. Early stated that he had asked for guards, and that no action had been taken, so that the event which he feared occurred, only two night watchmen being on hand to look after the big plant. The danger of such a fire was generally appreciated by those connected with the plant, and ample warning was given on the very day preceding the disastrous blaze, by a fire at the same place, which destroyed about \$3,000 worth of hay, and which at the time was attributed either to spontaneous combustion or to the heat of the boiler room. In the light of what occurred on the following day, however, it is fairly probable that the incendiaries made an attempt which proved unsuccessful, and returned to the attack. Several explosions during the "successful" fire led to the belief that bombs may also have been placed about the building, in order to spread the flames and possibly to injure firemen engaged in fighting the fire.

The fire department did excellent work on the blaze, but the highly inflammable nature of the hay stored in the building made it impossible to save either the building or its contents, and only the front and rear walls remained standing. The plant had been working full time, with a force of 90 men, turning out over 200 tons of compressed hay a day. At the time of the fire it was said that 100 cars of baled hay were on tracks waiting to be compressed, while probably three times that much was either enroute or ordered for the plant. Energetic efforts to start work again were started immediately after the fire, the principal handicap being the difficulty in getting the necessary machinery. An investigation for the purpose of placing the responsibility for the crime, if possible, was started by state and local authorities, but in the nature of the case it is believed that nothing of value can be discovered. A total of \$50,000 insurance was reported.

* * *

Sensational charges, in connection with the alleged forgery of bills of lading on corn shipments, were made by the Federal grand jury, reporting recently to the United States District Court at Cincinnati, in indictments naming the Ferger Grain Company. President August Ferger, Secretary Thomas M. Dugan and Robert H. Rasch, a messenger of the company, appeared in court in answer to the indictments, and through attorneys

pleaded not guilty to the charges. According to the allegations of the indictments, one of which contains 24 counts, the grain men forged and negotiated bills of lading covering 12 carloads of corn, purported to be shipped to the Ferger Grain Company by W. D. Springer, of Fountaintown, Ind., via the Cincinnati, Hamilton & Dayton R. R. Company, whereas, it is declared, W. D. Springer had no business with the grain company, and the town named is not on the C., H. & D., which has no agent in the Indiana town. These bills of lading, so forged, according to the indictments, were negotiated as collateral security for a loan of \$22,000 made by the Second National Bank of Cincinnati, the apparent value of the corn being \$31,177. Mr. Ferger refused to say anything about the charges save that the bank had lost nothing by the affair, and his attorney stated that the Ferger Grain Company is in excellent financial condition.

* * *

Suit has been filed in Cincinnati by the Baltimore Pearl Hominy Company, of Baltimore, Md., against Perin Bros., of Cincinnati, alleging that the Baltimore company contracted in April for 2,000 bags of white corn flour, at \$4.15 a hundred, and that there were only 676 bags delivered, making it necessary to buy in the open market the balance of the required amount. Another contract of 2,000 sacks, made on the same date, is said to have been defaulted, and a third contract, for 5,000 sacks, was also not complied with, according to the suit, a total of \$14,192.36 damages being sought in consequence.

* * *

Action has been taken by the Grain and Hay Exchange looking to the use of a large quantity of corn which is unfit for milling purposes, but which, in the view of the Exchange, should not be wasted under present conditions. It is said that there is in southern Indiana alone 15,000,000 bushels of soft corn unfit for milling, which, however, could be used for the manufacture of alcohol, and in a telegram sent to Food Administrator Hoover and H. E. Barnard, Food Administration agent for Indiana, this suggestion was made. The suggestion has met with official approval, and it is probable that this vast amount of grain will be converted to the purpose indicated.

* * *

The fact that, at this writing, Ohio has apparently gone "dry" by a very small majority, is of course of considerable interest to the Cincinnati grain trade, as well as to concerns shipping grain to this market for sale to the numerous distillers in the Cincinnati district. The Queen City and its vicinity have for years been known as a leading center for the distillation of whisky, and while some of the large plants are located across the river, in Kentucky, Ohio prohibition will be a severe blow to the trade handling distillers' dried grain, not to mention barley for the production of malt and rye. The action of the Government with reference to the production of liquor from grain had, of course, already put a stop to distillery operations, to a large extent, but this was looked upon as only a war measure; whereas the Ohio vote contemplates permanent prohibition. If prohibition carried, as the unofficial returns indicate, the law becomes effective February 1, 1919.

* * *

B. H. Wess, a well-known figure among Cincinnati grain and hay men, as head of the B. H. Wess Grain & Coal Company, is now one of the group of mayors around Cincinnati, having been elected to that office in the town of St. Bernard, adjoining Cincinnati on the north, at the November election.

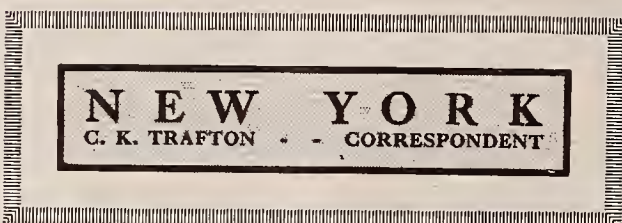
* * *

Frank Washington, a retired grain man of Roanoke, Va., died on November 6 while on a visit with relatives in Cincinnati. He was 73 years of age, and was formerly in the grain business in St. Louis, where he was also at one time a grain inspector. Burial was in Cincinnati.

* * *

At the October meeting of the Grain and Hay Exchange, W. C. Culkins, former executive secretary of the Chamber, and now Cincinnati Street

Railway Commissioner, was the guest of honor, and was presented by the Exchange with a handsome case of table silver as a token of the esteem in which he is held by his numerous friends in the grain and hay trade. Another guest of more than ordinary importance was C. W. Farrington, vice-president of the Railroad War Board Car Service Committee, who attended as the personal guest of President E. W. Fitzgerald, and was regaled, incidentally, with numerous more or less good-natured complaints regarding the tangled state of transportation conditions.



MEMBERS of the hay and grain trades on the New York Produce Exchange were sorry to hear recently that their old friend and colleague, Charles Schaefer, had been indicted for alleged violations of the Interstate Commerce Act. Mr. Schaefer has been well known in trade circles for many years, being head of the old Brooklyn firm of Charles Schaefer & Son. Both he and his son, as well as the Lehigh Valley Railroad and its Eastern Freight Agent, Fred E. Singer, were involved in the charges upon which the Federal Grand Jury returned six indictments. These covered 56 specific counts, including conspiracy, concessions, discriminations on shipments of hay, and of willful failure to observe the tariffs filed with the Interstate Commerce Commission.

It was stated that the irregularities covered the period from December 21, 1915, to October, 1917, during which time the railroads were generally heavily congested, and as a consequence many embargoes were put on hay, which was regarded as unprofitable freight. Nevertheless, it was claimed that the railroad company grossly favored the Schaefer firm to the exclusion of other shippers. As a result, it was asserted that the Schaefer family constantly had an ample supply of hay which they were able to sell at extremely high prices because of the general shortage, practically none of their competitors receiving shipments of importance.

Just why Schaefer & Son were favored by the railroad was not made clear, but the Federal prosecutor in charge of the case stated that every phase of the situation might be explained at the trial. Counsel for the accused said that the acts complained of were of technical character and that only the legality of the embargo was involved, and this had never been passed upon by the U. S. Supreme Court. The maximum penalty for each of the offenses against a corporation is a fine of \$10,000 for each offense and the same fine and two years imprisonment against personal defendants. Bail was fixed at \$5,000 in each case.

* * *

Six million dollars is certainly a nice little contribution and the Liberty Loan Committee of the New York Produce Exchange surely deserves great praise for their good work, especially as they had set \$5,000,000 as their goal when they started their "drive" last month. Every one of the many different lines of business conducted on the Exchange was represented on this committee, which was made up as follows: A. P. Walker, chairman; George W. Blanchard, vice-chairman; Edward R. Carhart, Yale Kneeland, Wm. J. Brainard, Wm. C. Mott, C. Walton Andrus, Chas. W. McCutchen, George A. Zabriskie, Harry J. Greenbank, Edward Flash, Jr., F. B. Cooper, Benj. Frankfeld, J. B. Smull, Walter Moore, A. Montgomery, Jr., R. N. Schoonmaker, W. B. Pollock, M. B. Snevily, Wm. E. Pritchard, Edward G. Broenniman, J. P. Grant, and Henry Holt. This committee went to work with great vigor and enthusiasm and found the members not at all backward in responding, numerous decidedly large subscriptions being received, one well known firm putting itself down for \$1,000,000 worth. The committee erected a large dial in the center

of the floor and the progress of the indicator from each division of hundred thousands was watched with much interest, the attainment of each new \$1,000,000-mark being greeted with loud cheers. Early in the final week of the campaign a special rally was held to which the outside public was invited. Stirring speeches were made by President R. A. Claybrook and by Dwight W. Morrow of J. P. Morgan & Co. As a result nearly \$2,000,000 was subscribed in less than an hour. The final "drive" was made on the day before the campaign terminated. The wide-spread announcement that James W. Gerard, ex-ambassador to Germany, would speak, and that music would be furnished by the Seventy-first Regiment Band, attracted a large crowd, which was evidently deeply impressed by the speeches of Mr. Gerard, Charles W. McCutchen, and other prominent members. As a consequence subscriptions poured in freely and before long the originally established maximum of \$5,000,000 was passed.

* * *

Edwin Selvage, who celebrated his 78th anniversary late last month, was the guest of honor at an informal little function on the Produce Exchange floor, at which he was made the recipient of a handsome watch-chain and locket by his many old friends and associates. This affair was engineered with great secrecy by Wright S. Travis, another veteran of the grain trade, who made the speech of presentation. On one side the locket bore Mr. Selvage's initials, and on the other the inscription: "From friends on the N. Y. P. E., 1917." Mr. Selvage, who started in business as a boy with a Baltimore cotton firm, came to New York after the war, entering the flour and feed trade with the old firm of Lane Son & Co. In 1869 he entered the grain elevating business, being employed by E. G. Burgess, president of the International Elevator Company, with which Mr. Selvage is now connected. Mr. Selvage joined the Produce Exchange in 1876 and three years later went with the elevating firm of Knapp & McCord, with whom he stayed until the amalgamation of several concerns into the International. During his leisure time he takes an active part in Masonic affairs. He celebrated his 50th anniversary as a member of that order last year and received a gold lodge card from his lodge and a Patriarch's Badge from the Masonic Veterans.

* * *

Members of the Produce Exchange, and especially in the feed and grain trade, heard with regret that their old associate, Wm. H. Budd, had resigned his membership. For many years Mr. Budd had acted as representative on 'Change for the old Brooklyn firm of S. W. Bowne & Co., elevator owners and grain and feed distributors. Recently that firm went out of business and the old site in Brooklyn was rented to the Imperial Tobacco Company. Mr. Budd then joined the feed and grain distributing house of Shaw & Truesdell, remaining in the Brooklyn office as they were already well represented on 'Change. While active on the floor Mr. Budd made many friends by his kind and genial manner.

* * *

C. A. Robinson, prominent in grain circles for many years, and head of the local firm of Robinson & Sweet, returned to his post on the Produce Exchange recently after a vacation of about two weeks, most of which was spent on a Southern trip. He went to New Orleans by boat and returned by rail, stopping off for brief visits at Spartanburg, S. C., and Asheville, N. C.

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A somewhat general feeling of dissatisfaction was noticeable among members of the export grain trade in this market following the announcement of the new arrangements for the conduct of business with the Allies as agreed upon at the conference between representatives of various export firms and the Wheat Export Company (buyers for the Allies). In short, it was claimed that the margin of profit would be so small as to make it almost unprofitable to do business. This seemed rather vague and incomprehensible as no mention is made in the arrangements regarding restrictions on profits. However, it was the general opinion that in view of the peculiar circumstances the margin of profit

could not be more than $\frac{3}{8}$ or $\frac{1}{2}$ cent per bushel, which many assert is barely enough to pay office expenses and other overhead charges.

* * *

Among the recent visitors on the Produce Exchange were Wm. H. Martin and Arthur Cutten of Chicago. Both of these gentlemen, who have been prominent grain operators on the Board of Trade for many years, stated that they had been practically idle for a long time, partly because it was virtually impossible to do any business because of the many restrictions on trading, and partly because they were in sympathy with the efforts of the Food Administration to eliminate speculative trading in order to prevent unjustified advances in prices. Mr. Martin has recently spent about 3 months on his ranch in Montana.

* * *

Other well known Chicago grain men who visited the local market recently were: George E. Marcy of the Armour Grain Company, E. F. Rosenbaum of the J. Rosenbaum Grain Company, E. Lowitz of E. Lowitz & Co., F. S. Cowgill of Bartlett-Frazier & Co., W. S. Edwards, Frank E. Ely, Wm. H. Colvin and E. R. Hamilton.

* * *

The shockingly sudden death of Frank J. Lennon, which was announced on the Produce Exchange early this month, caused much sorrow among his many friends and associates in the grain, hay, and feed trades. Mr. Lennon, who was 50 years of age and had been well known for many years in trade circles, was killed in an automobile accident while on an errand for his wife who had been convalescing after a long illness. Together with a friend who had been visiting the family, Mr. Lennon left his home in Mount Vernon, N. Y., to motor to New Rochelle. After executing his errand he started on the return trip, when for some unknown reason the car swerved from the road and was overturned. Shortly afterwards another motorist discovered the dead bodies of the two under the machine.

* * *

Members of the hay and grain trade on the New York Produce Exchange were not particularly surprised when notice was posted on the bulletin boards that James M. Hait had tendered his resignation as a member. At one time Mr. Hait was active, and especially in the hay trade, but for the past two years he has been seldom seen on 'Change. It was explained that he had little or no further interest in the hay trade, spending most of the time on his farm in New Jersey.

ST. JOSEPH ALLAN T. WEST - CORRESPONDENT

THE new Larabee Mill expects to be in operation this week. Wheat is already arriving and will be stored in the new tanks. T. J. Holdridge, Jr., manager, has made application for membership in the St. Joseph Exchange.

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Chas. P. Wolverton, manager of the Grain Belt Mills Company, has been elected to fill the balance of the term of G. W. Helm on the Board of Directors. Mr. Helm was recently elected vice-president of the Exchange.

* * *

Very little new corn is coming into this market. A good many samples have been received from the country but corn is very wet and it is a hard job to shell it. However, the present weather had ought to make a big improvement in the condition.

* * *

The trading hall of the St. Joseph Exchange was recently decorated in tan and ivory and it presents a very handsome appearance.

* * *

W. R. Spiers of the Mid-West Grain Company, who has been in Texas for the past two months, returned

this week and will cover the surrounding territory from now on.

* * *

Miss Elizabeth Keyes, head bookkeeper for the Gunnell-Windle Grain Company, is spending a two-weeks' vacation in Kansas City and Lawrence, Kansas.

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Chas. Avery, of the Simons-Shields-Lonsdale Grain Company of Kansas City, Mo., has spent a great deal of the time in St. Joseph during the past week in the interests of his firm.

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It is reported that Horace F. Leet, of Maryville, Mo., has sold out his interests at that place but has made no intimations of his intentions in the future. Mr. Leet is a member of the St. Joseph Exchange.



RECEIPTS of grain of all kinds on the Duluth market continue light and operators have almost given up hope of any substantial tonnage being handled between now and the close of lake navigation.

The slow movement is attributed in a great measure to dissatisfaction of spring wheat growers over the prices being paid for grain running below No. 3 Northern grade under the new Federal inspection system. They contend that the milling value of much of this wheat is nearly equal to No. 1 Northern, and that the penalty against it is consequently too great.

The views of farmers and handlers on that score were set out by a deputation that recently waited upon Julius H. Barnes, president of the Food Administration Grain Corporation at New York. Mr. Barnes expressed his sympathy with the views of the deputation on some of the points touched upon, and he promised a decision in the near future as to whether any changes could be made in the basis of marketing spring wheat off-grades.

* * *

For the present crop year from August 1 up to the end of last week, grain receipts at elevators at the Head of the Lakes aggregated 18,921,000 bushels as against 23,981,000 bushels up to the same period last year.

Stocks of all grains in the elevators at present aggregate only approximately 3,500,000 bushels against over 14,000,000 bushels last year. Supplies of wheat amount to only about 1,350,000 bushels against 10,200,000 bushels last fall at this time. Stores of grain in the houses are the lowest in the histories of the elevator companies at this period of the fall movement.

* * *

Some experts in the trade express the opinion that grain officials of the Food Administration are not greatly concerned over the extent of the marketing just now as long as consumers in the East and the Allies are obtaining sufficient grain to cover their needs. In that connection it is pointed out that as a result of the arrangement made with the Canadian Government, Eastern millers are being supplied with wheat shipped from Fort William and Port Arthur, leaving the grain from the American West available later on to fill up any holes. It was intimated though, in supposedly well informed quarters recently that the Railway's War Board may take drastic action in the emergency in ordering the Northwest roads to divert as large a proportion of their car equipments as possible (reports say 3,000 cars), into the grain traffic during the next few weeks in order that a larger wheat tonnage than now appears probable may be available for shipment down the lakes up till December 12. That the Food Administration Grain Corporation contemplates making shipments all-rail to the seaboard during the winter months is shown in an inquiry

regarding cars made by it this week. The railroad in receipt of the inquiry was unable however to guarantee that any cars would be available for the movement. The car shortage is asserted to have been accentuated by the slow run to the terminals from points in western Minnesota and North Dakota where considerable rolling stock had been spotted. At other points over the West the interior elevators have become plugged up, and few cars are available to afford any relief, elevator interests here assert.

* * *

Spring wheat arriving at the elevators here, continues to grade remarkably high, according to officials of the Minnesota State Inspection Office here. It is asserted that fully 85 per cent of the receipts inspected during September and October graded No. 3 Northern or better. This is in direct contrast to last year when the trade was hampered by the large proportion of rusted and shrunken grain coming in. In the 1915 season, the early receipts showed a fair percentage of No. 1 hard wheat, but later as a result of prolonged wet weather, the handling of damp grain became a serious problem, and the grading ran off accordingly.

* * *

Ray Withrow, formerly representative of the H. Poehler Company on the Duluth market, is now operating on the Chicago Board of Trade, having formed a connection with a house there.

* * *

Members of the Duluth Board of Trade established a proud record for themselves in rolling up subscriptions aggregating \$2,310,000 for the Second Liberty Loan. The Barnes-Ames Company headed the list with a subscription of \$1,000,000. All the elevator houses were included in the list for substantial amounts.

* * *

Owing to conditions brought about through these new marketing regulations, the sampling bureau in connection with the Duluth market has been compelled to advance its fees in order that the service might be made self-sustaining. The following scale of fees is now in effect: For sampling wheat and other grains and flaxseed into cars, 75 cents per car; for sampling wheat and other grains into vessels, 50 cents per car; for sampling flaxseed into vessels, 75 cents per 1,000 bushels.

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J. L. Mullin of Ely, Salyards & Co. became a benedict recently. His many friends on the Duluth Board of Trade consequently enjoyed the cigars at his expense.

* * *

Trade in coarse grains has been fairly active of late. The demand for feeds has improved with the advent of colder weather, but receipts of oats have been so limited during the past month that on some days there was scarcely a market. Business in barley and rye has been good and their quotations have been ruling easier of late in line with the general tendency towards lower figures in food-stuffs. From a range of from \$1.10 to \$1.36, barley has eased off to a range of from 97 cents to \$1.27. Cash rye has eased off 12 cents lately to \$1.74. An interesting recent development was the inaugurating on October 25 of trading in rye futures on the Duluth market. The November future has been pegged at \$1.76 and the December at \$1.78 while the May option has ranged at from \$1.80 to \$1.85.

* * *

R. M. White of the White Grain Company reported a good call for oats and other feedstuffs from the large lumber companies operating in this territory. As a result of the general shortage of hay through this district, business in feeds has started in earlier than usual, and Mr. White is counting upon substantial sales during the winter months. Thus far receipts of oats at Duluth have been almost at the zero mark.

* * *

Strict orders against mixing Southwestern with Northern grown flaxseed have just been issued by the Minnesota State Grain Inspection Department. Southwestern flax, which is designated anything grown south of the Minnesota state line, must be placed in special bins.



ELEVATOR AND GRAIN NEWS

IOWA

A new 20,000-bushel elevator is to be constructed at Decatur, Iowa.

A 20,000-bushel elevator is to be erected at Carson, Iowa, by J. H. Port.

Work is practically completed on the new farmers elevator at Rake, Iowa.

J. C. Folger has sold his interest in the Taopi Elevator at Alton, Iowa.

Another story has been added to the McGargill elevator at Sidney, Iowa.

A new elevator is being constructed at Laurel, Iowa, by R. J. McCry & Co.

O. Kaeberle has sold out his grain, lumber and coal business at Newhall, Iowa.

The Nebraska-Iowa Grain Company is remodeling its elevator at Pacific Junction, Iowa.

The Hubbard Grain Company will erect a new 35,000-bushel elevator at Hayfield, Iowa.

A new addition is being built to the elevator of Burke & Stephenson at Story City, Iowa.

Capitalized at \$50,000, the Ames Grain & Coal Company has been formed at Ames, Iowa.

H. G. Morgan & Co., of Allerton, Iowa, is succeeded by the Allerton Grain & Coal Company.

The elevator of C. O. Hoff at Traer, Iowa, has been sold by him to L. W. Hess of Eagle Grove.

The Farmers' Mutual Elevator Company now owns the elevator of M. E. Silvins at Granite, Iowa.

The old Green Elevator at Alford, Iowa, has been torn down. The plant was built more than 20 years ago.

The Farmers' Co-operative Exchange of Mt. Pleasant, Iowa, will build a new elevator there, it is reported.

The elevator at Brushy (r. f. d. Duncombe), Iowa, has been taken over by the Brushy Mercantile Company.

Work has been started on the new 40,000-bushel elevator of the Farmers' Elevator Company of Allison, Iowa.

The Rothschild Elevator, located at Coon Rapids, Iowa, has been purchased by the Albers Commission Company.

The Rothschild Grain Company has recently taken over an elevator and coal business located at Lenox, Iowa.

Construction work has been started on the new Farmers' Co-operative Elevator Company's plant at Aplington, Iowa.

The elevator at Primghar, Iowa, has been purchased by Chas. Dozler of Templeton and J. E. Morris of Gray.

A new elevator is to be built at Remsen, Iowa, on the site of the old Peavey Elevator, which has been torn down.

Alden Armstrong is president of the new Farmers' Elevator Company of Lake View, Iowa, capitalized with stock of \$50,000.

The elevator of the J. H. Sheehan Estate at Clermont, Iowa, has been purchased by the Farmers' Co-operative Society.

R. T. Hamilton is building a 10,000-bushel oats elevator and a 10,000-bushel corn crib on his farm near Iowa Falls, Iowa.

G. Bowles has disposed of his grain elevator and implement building and office at Lacey, Iowa, to J. C. Long and G. Gable.

The Hutchison Elevator at Anderson, Iowa, which Van Buskirk Bros. of Shenandoah recently purchased, is being remodeled.

The grain, seed and feed business of Larson & Nelson of Thor, Iowa, has been sold out to Bowes, Billings & Kester of Algona.

The elevator of the Farmers' Elevator & Supply Company at Peterson, Iowa, has been remodeled and equipped with new machinery.

G. H. Bunton has sold his interest in the elevators at Walnut, Marne, Exira and Brayton, Iowa, and will retire from the grain business.

A. Bailey is building a new 25,000-bushel cribbed elevator at Diagonal, Iowa. The contract was let to the Burrell Engineering & Construction Company.

Several improvements have been made on the plant of the Arnold Grain Company at Humboldt,

Iowa. Wm. Griffin, O. V. Critz and H. McClelland are interested.

The L. J. Button Elevator at Sioux Rapids, Iowa, was recently purchased by the Western Elevator Company of Minneapolis, Minn. Oscar Eaton will act as manager.

James M. Jeffrey, M. D. Burns and R. B. Mayall have formed the Farmers' Grain & Mercantile Company of Clinton, Iowa. Capital stock of the company is \$10,000.

A partnership has been formed by M. McCoy and John Sebilsky and they have leased and will conduct the Waterloo, Cedar Falls & Northern Elevator at Waverly, Iowa.

Peter Kappes is president and C. Loetscher, secretary of the Farmers' Elevator Company of Ashton, Iowa, which was recently incorporated. Capital stock amounts to \$100,000.

The Farmers' Co-operative Exchange, made up of Henry County, Iowa, farmers, is interested in the erection of a grain elevator. J. A. Nickolaus is president of the organization.

J. L. Bruce is now the sole owner of the elevator and pop-corn business at Odebolt, Iowa, which has been conducted as Reuber & Bruce. Aug. H. W. Reuber retires from the business.

The Farmers' Co-operative Elevator Company has been incorporated at Ogden, Iowa, capitalized at \$25,000. L. W. Beckman, G. K. Williams, H. J. Lark, H. C. Spurrier, Lewis Marlow, A. Treloar, C. J. Heldt are interested.

Incorporation papers have been filed for the Walnut Grain Company of Walnut, Iowa, capitalized with stock of \$10,000. Geo. W. Adams, Walter Sievers, A. A. Hagge and P. H. D. Hagge are interested. Walter Sievers is president; Geo. W. Adams, vice-president; P. H. D. Hagge, secretary-treasurer.

ILLINOIS

Jno. Lawson of Redmon, Ill., contemplates building a new elevator.

J. N. Hairgrove has sold his interest in the elevator at Lowder, Ill.

Henry Bender sold his elevator located at Dubois, Ill., to J. A. Reminger.

D. Wood is interested in the erection of a grain elevator at Wapella, Ill.

The Hartwell Ranch Company will erect a large elevator near Hillview, Ill.

An addition is being built to the elevator plant of E. B. Conover of Buffalo, Ill.

A new elevator is being erected at Fancy Prairie, Ill., with John Peters in charge.

The Farmers' Elevator at Alvin, Ill., was sold at public auction to T. Watson.

The Farmers' Elevator Company of Verden, Ill., will erect a grain elevator there.

T. F. Abrams has purchased the elevator of R. W. Noble, located at Bethany, Ill.

Chas. E. Blankenship's elevator at Patoka, Ill., has been purchased by H. R. Hall.

Geo. A. DeLong is remodeling his grain elevator which is situated at Gibson City, Ill.

The Van Petten Elevator & Grain Company of Van Petten, Ill., is repairing its elevator.

Two new elevators are being built by McFadden & Co., one at Topeka and one at Kilbourne, Ill.

The farmers around Butler, Ill., are organizing a company to operate a co-operative elevator there.

A small elevator has been built at Oliver, Ill., by the Rudy-Huston Grain Company of Paris, Ill.

A 60,000-bushel grain elevator is to be erected at Homer, Ill., by the Farmers' Elevator Company.

The farmers of Belvidere, Ill., are interested in the erection and operation of a grain elevator at that point.

J. S. Maloney has sold his elevator located at Polo, Ill., to T. W. Coffman, who will take possession March 1.

Five electric motors have been purchased by C. B. Spang and will be installed in his elevator at Georgetown, Ill. A larger corn sheller has also been purchased. The dumps are being overhauled and all the machinery put into first class condition.

A new cement warehouse is to be built at Minonk, Ill., by the Minonk Farmers' Grain & Supply Company.

The Farmers' Elevator Company of Herman, Ill., will convert one of its elevator plants into a feed house.

The Farmers' Grain Company of Fairbury, Ill., has increased its capital stock from \$20,000 to \$30,000.

A new office, 14x20 feet, is to be built at Yuton (r. f. d. Bloomington), Ill., for the Yuton Grain Company.

The Farmers' Elevator Company of Ocoya, Ill., has made plans to organize under the pro rata co-operative plan.

The Farmers' Elevator Company has been formed at La Prairie, Ill., and has purchased the Tenhaeff Elevator there.

A new electric motor and a Western Sheller have been installed in the elevator of W. B. Cavanaugh at Kewanee, Ill.

The Williamsburg, Ill., elevator has been sold by R. F. Davis to F. W. DeHart. The storage capacity is 50,000 bushels.

The old elevator at Risk (r. f. d. Forrest), Ill., has been torn down and will be replaced by a new one erected by Harry Tjardes.

A company is being organized at Tucker (r. f. d. Bourbonnais), Ill., for the purpose of building and conducting a grain elevator.

A new grain elevator is to be built at Rosemond, Ill., by H. H. Maxley and others, replacing the one which was destroyed by fire.

A farmers elevator company has been organized at Randolph, Ill., for the purpose of erecting and conducting a grain elevator.

The Melvin Farmers' Grain Company of Melvin, Ill., will build a new office and feed room. It is also roofing the elevator with steel.

Capitalized with stock of \$20,000, the Baldwinville Farmers' Elevator Company has been organized at Baldwinville (Paris p. o.), Ill.

The charter of the Cropsey Elevator Company of Cropsey, Ill., has been amended, increasing the capital stock from \$10,000 to \$30,000.

A farmers' co-operative elevator company has been organized at Blandinsville, Ill., and taken over the Roberts Elevator with a capacity of 50,000 bushels.

A crib, 28x80 feet, is to be erected at Arcola, Douglas County, Ill., for the Farmers' Elevator Company. The capacity of the crib will be 35,000 bushels.

Davis Bros. & Ash have purchased the R. F. Cummings Grain Company's elevator at Pittwood, Ill., and expect to rebuild next year if conditions are favorable.

A new elevator is under course of erection at Easton, Ill., for McFadden & Co. A small electric light plant to furnish light for the plant is also to be installed.

R. C. Baldwin, D. N. Funk, C. W. Welch and others have incorporated as the Funks Grove Grain Company at Funks Grove (r. f. d. Shirley), Ill., capitalized at \$10,000.

M. L. Hill, O. M. Mackey, and Geo. Buchanan have incorporated the Westville Grain & Elevator Company of Westville, Ill. The company will erect and conduct a grain elevator.

The grain elevator of Louis Johnson located at Morrisonville, Ill., has been sold to Manning & Manning. The elevator is of concrete and steel construction and has a capacity of 55,000 bushels.

Henry C. Whittemore, Chas. J. Campbell, Eugene J. McCabe and Henry Shafer have incorporated as the Lanesville Farmers' Grain Company of Lanesville, Ill. The company has capital stock of \$13,000.

The Chattan Farmers' Co-operative Elevator Company of Chattan (r. f. d. La Prairie), Ill., has contracted with the Burrell Engineering & Construction Company for a 20,000-bushel cribbed elevator at that place.

Incorporation papers have been filed for the Farmers' Grain & Produce Company of Taylorville, Ill. D. L. Dunbar, Fred Hedrich, C. A. Peabody, L. F. Peek and others are interested. Capital stock amounts to \$15,000. The company will, in all probability, erect a new grain elevator.

INDIANA

The elevator of P. Reising & Son at Poseyville, Ind., is being remodeled.

Electric motors have been installed by the Shelby Grain Company of Shelbyville, Ind.

The Winthrop Elevator Company of Winchester, Ind., has been dissolved as a corporation.

New machinery has been installed by the Fisher Grain & Feed Company of Evansville, Ind.

The final certificate of dissolution has been filed by the Fairland Grain Company of Fairland, Ind.

Valentine & Valentine Elevator Company of Whiteland, Ind., is to build a 25,000-bushel elevator there.

The capital stock of the Nichols Grain & Hay Company of Lowell, Ind., has been increased to \$30,000.

A 10-horsepower motor has been installed in the plant of the Middlebury Grain Company at Middlebury, Ind.

F. C. Brown & Co.'s elevator at Belshaw (Lowell p. o.), Ind., has been purchased by the Farmers & Gleaners organization.

The Crabbs, Reynolds, Taylor Company has erected a 10,000-bushel elevator at Westpoint, Ind. John Gordon is manager.

The Indiana Harbor Elevator, Indiana Harbor, Ind., will in future be operated under the name of New York Central Elevator.

The capital stock of the Farmers' Milling & Elevator Company at Veedersburg, Ind., has been increased from \$10,000 to \$35,000.

Incorporation papers have been filed for the Greens Fork Elevator Company of Greens Fork, Ind., capitalized at \$10,000. The directors of the company are: Chas. E. Knot, Geo. M. Sowers, Wm. E. McLaughlin, Wm. K. Cheesman and M. Gentry.

C. E. McFadden, W. T. Palmer, H. M. Brown, B. T. Dosler are interested in the new 16,000-bushel elevator which was recently erected at Hamlet, Ind. The plant is equipped with two cleaners, an oat clipper, corn sheller, drier, hopper scales and steam engine of 100 horsepower. They will operate as the Hamlet Grain Company.

OHIO AND MICHIGAN

F. C. Goodrich has succeeded Babcock Bros. in the grain business at Ashley, Ohio.

A new grain and potato warehouse is to be built at Provemont, Mich., by A. J. Otto.

The Butternut Elevator Company of Butternut, Mich., has succeeded Banton & Kerr.

The stock of the Alma Elevator Company at Alma, Mich., has been increased to \$25,000.

Capitalized with stock of \$9,000, the Rhodes Elevator Company was organized at Rhodes, Mich.

The Plymouth Elevator Company was recently organized at Plymouth, Mich., capitalized at \$25,000.

A new elevator is to be established at Brentcreek, Mich., by the Farmers' Elevator Company.

An up-to-date elevator has been built at Lakeville, Ohio, by the Farmers' Equity Exchange Company.

Half interest of E. J. Hout in the elevator at Pavonia, Ohio, has been sold to Morgan Pittinger.

Capitalized with stock of \$25,000, the Lennon Elevator Company has been incorporated at Lennon, Mich.

The Holly Grain & Produce Company of Holly, Mich., has been incorporated, capitalization being \$25,000.

The Heffner Grain Company of Circleville, Ohio, has increased its capital stock from \$10,000 to \$15,000.

The Farmers' Elevator & Warehouse Company of Reese, Mich., has been incorporated capitalized at \$50,000.

A \$4,000 grain drier will be installed in the plant of the Fostoria Farmers' Elevator & Exchange Company at Fostoria, Ohio.

The recently organized Gleaners' Co-operative Elevator Company at Hartford, Mich., has purchased the elevator of Edw. Finley.

The capital stock of the Erlin Farmers' Elevator & Supply Company of Erlin (r. f. d. Fremont), Ohio, has been increased from \$15,000 to \$25,000.

An organization of farmers has purchased the grain elevator and coal business of Fred D. Brandt of Van Wert, Ohio. The business was taken over November 1.

The old location of the Gates Elevator Company at Cleveland, Ohio, has been vacated to make room for a new bridge. The company will locate a larger plant along the Belt line.

The Farmers' Elevator Company of Marshall, Mich., has placed its contract with the Burrell Engineering & Construction Company for a 15,000-bushel elevator of concrete construction.

The contract has been let by Henry Ford & Son of Detroit, Mich., for its new grain elevator at that place. The plant will be of reinforced concrete and

will be completed before January 1, 1918, at a cost of about \$175,000.

The Mt. Sterling and Cook, Ohio, elevators of the Rife & Morris Company have been sold to the Farmers' Grain Company, which was recently organized. Chas. H. Clark, John Sark and Mr. Plum are interested in the latter company.

The new Farmers' Co-operative Elevator Company of Holly, Mich., has broken ground for its elevator, which will be joined to the present building, known as the Harrow Potato House. Machinery for feed grinding and bean picking is to be installed in the old plant.

SOUTHERN AND SOUTHWESTERN

E. E. Thomas has disposed of his Newkirk, Okla., elevator.

L. Shobe and Wm. Enlow will conduct a grain business at Woodward, Okla.

The Farmers' Elevator Company of Groom, Texas, has let the contract for a new elevator.

A corn elevator is to be built at Blytheville, Ark., for J. L. Russell Commission Company.

The McInnis Grain & Elevator Company of Okolona, Miss., will install a large corn sheller.

A 20,000-bushel fireproof elevator is to be built at Pondcreek, Okla., for the Morrison Bros.

G. T. Childress has purchased an interest in a feed and grain business at Collinsville, Okla.

The Sowell Grain Company has sold out its New Wilson, Okla., business to W. F. Russell & Co.

Reinhardt & Co. have sold their grain, hay and seed business at McKinney, Texas, to L. C. Voekel.

A wholesale grain and feed business is to be opened in Jellico, Tenn., by the Jellico Grocery Company.

Work has been completed on the new 12,000-bushel elevator of the Hand Trading Company at Pelham, Ga.

O. T. Bryant and W. H. Moore have opened at Lewisburg, Tenn., in the old Lewisburg Grain Company's plant.

Guy Marshall has disposed of his elevator, grain and coal business at Watonga, Okla., to the Marshall Grain Company.

The property of the A. B. Crouch Grain Company, Temple, Texas, is to be sold at auction at Temple on November 16.

The Jordan Grain Company has sold its elevator, coal and lumber business at Guymon, Okla., to the Guymon Equity Exchange.

L. M. Kuykeldall has sold out his interest in the Duncan Elevator Company of Duncan, Okla., to J. J. Hardin and C. C. Coleman.

The capital stock of the Plosser-Knecht Flour & Grain Company of Birmingham, Ala., has been increased from \$5,000 to \$25,000.

The Hannah-Mansfield Grain Company's grain business at Aline, and Yewed, Okla., has been purchased by the Kansas Flour Mills.

The plant of the Lyle-Taylor Grain Company at Albany, Ala., is being enlarged. The concern has a storage capacity of 35,000 bushels.

The Yoakum Grain Company, Inc., of Yoakum, Texas, has let the contract for a reinforced concrete and hollow tile grain storehouse.

A company is being promoted at Eufaula, Ala., by W. Lawrence Wild, L. Y. Dean, Jr., and others for the purpose of building a grain elevator.

The grain elevator and flour milling plant of the Farmers' & Merchants' Milling Company at Ripley, Tenn., is being rebuilt after the recent fire.

A 175,000-bushel elevator has been completed at Waco, Texas, by the J. G. Smith Grain Company. They will conduct a wholesale grain, hay, feed and mill product business.

A battery of concrete grain elevators is to be built by the Limestone Milling Company of Roncerverte, W. Va. R. K. Ford and others are interested.

A grain elevator is to be built at Hickman, Ky., for the Nashville, Chattanooga & St. Louis Railway. Machinery for unloading barges is also to be installed.

N. W. Calcutt, E. Rice, S. G. Latta, J. C. Doyle and H. C. Calcutt have incorporated the Tennessee Grain Company of Dyersburg, Dyer County, Tenn., capitalized at \$70,000.

The property of the E. T. Coleman Coal & Grain Company at Plain View, Texas, has been purchased by Lewis & Peace, who will operate their two places under the name of the Lewis Mill & Grain Company.

The Chalfant-Nelson Grain Company of Clinton, Okla., has sold several of its plants to the Guthrie Milling Company. The transfer includes elevators and mills located at Canton, Bessie, Elk City, Strong City and Clinton.

A grain elevator and warehouse is to be built at Bay City, Texas, for the LeTulle Mercantile Company of Bay City. The elevator proper has

a capacity of 20 cars and the warehouse has capacity of 30 cars.

The Newbern Grain Company of Newbern, Tenn., has been organized to operate a grain business and corn shelling plant. Capital stock of the company is \$5,000. J. H. Scobey, M. W. Ewell, W. O. Harriet, J. B. Crenshaw and M. E. Montgomery are interested.

The grain elevator at Tuscaloosa, Tuscaloosa County, Ala., has been leased by the Southern Grain Company. The plant has been repaired and equipped with modern machinery. F. G. Blair, E. L. Clarkson, Hugo Friedman, C. F. Elinn and C. H. Penick are interested.

The O'Bannon Company of Claremore, Okla., has purchased the plants of the Claremore Mill & Elevator Company at Claremore, Okla., and that of the Wagoner Roller Mill Company at Wagoner, Okla., giving it an aggregate storage capacity of 250,000 bushels. The Wagoner plant has been overhauled, loading and unloading capacity increased, and the cleaners have been so arranged that additional batteries may be provided. The Claremore plant is to be overhauled and a large seed cleaning plant installed. In addition to this will be installed an oat clipper, wheat and oats separator, and a meal and corn chop plant, specializing in poultry food.

EASTERN

The grain and feed business of S. W. Bowne & Co., at Brooklyn, N. Y., has been purchased by the Shaw & Truesdell Company.

The Somerset Grain Company was recently incorporated to operate at Auburn, Mass., by G. P. Martin and others. Capital stock amounts to \$20,000.

F. W. Whitcomb, Irving L. Pruyn and Chas. F. Shellard have incorporated at Chatham Center, N. Y., as the Chatham Milling Company to deal in grain, feed, flour and seeds. Capital stock is \$10,000.

Dean K. Webster is president and James H. Lord, treasurer of the Lord Farms Company of Lawrence, Mass., which will handle grain and other farm products. Capital stock of the company amounts to \$125,000.

MINNESOTA AND WISCONSIN

The Great Western Elevator Company will build a new plant at St. Louis Park, Minn.

A new warehouse will be built at Chetek, Wis., by the Chetek Feed & Grain Company.

The Niels Elevator Company has purchased the Quinlan Elevator at Little Falls, Minn.

The Clark Grain Company of Chippewa Falls, Wis., will erect a new storage house there.

The office building of the Farmers' Elevator Company at Bigelow, Minn., has been enlarged.

The elevator located at Hixon (mail to Crookston), Minn., has been purchased by Chas. Kiewel.

A Bauer attrition mill has been installed by the Fisher Grain & Feed Company of Evansville, Wis.

A. L. Wagner has sold his elevator and warehouse at Haven, Wis., to the Ebenreiter Lumber Company.

Numerous improvements have been made on the elevator of the Northern Elevator Company at Colfax, Wis.

The storage capacity of the Clarx Milling Company of Minneapolis, Minn., is being increased to 75,000 bushels.

The Ihlen Farmers' Elevator at Ihlen, Minn., has been repaired and generally overhauled. O. T. Johnson is manager.

Fuller & Askerman now occupy larger quarters at Nevis, Minn., and will handle rye, oats, barley, beans and grain seeds.

The new elevator of the Farmers' Elevator Company at Miloma, Minn., has been completed. M. G. Reynolds is grain buyer.

A 5-horsepower electric motor has been installed by Leonard Garding in his elevator at Paynesville, Minn., replacing a gasoline engine.

The Farmers' Elevator Company has been organized to operate at LeSueur, Minn. S. Doherty is president. Capital stock is \$10,000.

The Farmers' Co-operative Elevator Company of Westbrook, Minn., is building a storage elevator consisting of eight bins each of 5,000 bushels capacity.

The Farmers' & Merchants' Company of Argyle, Minn., has amended its charter changing the amount of stock to be held by individuals from 10 to 40 shares.

A warehouse is being built at Wanamingo, Minn., for the Farmers' Elevator Company on the site formerly used for coal sheds by the Farmers' Lumber Company.

The Jeffers Grain Company has filed incorporation papers at Jeffers, Minn., to conduct a grain

elevator and warehouse business. The company is capitalized at \$12,000.

The Kuehl & Bruss elevator, feed and flour warehouse and the William Rahr Sons Company's elevator at Brillion, Wis., has been purchased by the Farmers' Advancement Association of Brillion.

The Frazee Elevator, in which L. J. Frazee, A. W. Gamble and U. J. Pfeffner are interested, at Fairmont, Minn., has been purchased by the Pfeffner Elevator Company of Blue Earth, Minn., which consists of Harry and Frank Pfeffner.

Incorporation papers have been filed for the Lomira Elevator Company of Lomira, Wis., capitalized at \$10,000. Jos. F. Stroub, D. M. Rosenheimer and L. P. Rosenheimer are interested. The H. Grantman grain and coal elevators, warehouse and feed store at Lomira have been purchased.

THE DAKOTAS

The new farmers elevator at Harmon, N. D., has been opened.

The Bowman Equity Exchange of Bowman, N. D., will erect a new grain elevator there.

A new grain elevator is being built by R. W. Cope on his farm near Artesian, S. D.

The C. P. Van De Water Elevator at Canova, S. D., has been purchased by Chas. G. Buchele.

A new elevator has been built at Elliott, N. D., for the Farmers' Elevator Company of that place.

The Verona Farmers' Elevator Company of Verona, N. D., has filed an application for dissolution.

An automatic scale of 1,500 bushels' capacity has been installed by the Farmers' Elevator Company of Montrose, S. D.

W. L. Hoover has incorporated at Levant (Marvel p. o.), N. D., the Levant Elevator Company, capitalized at \$25,000.

The Farmers' Elevator at Griffin, N. D., which burned, is to be rebuilt. The contract for the new building has been let.

A new store room is being built by the Farmers' Co-operative Elevator Company of Hartford, S. D., adjoining its office building.

The Belfield Farmers' Elevator Company has purchased the Farmers' Elevator situated at Belfield, N. D. The consideration is \$10,000.

A 50,000-bushel elevator and 50-barrel mill has been completed at Kathryn, N. D., by the Farmers' Mutual Elevator Company, costing \$60,000.

Julius Olson has sold the King Elevator Company's business at Missionhill, S. D., to Clarence Hanson. He will operate under the same name.

The Farmers' Land, Loan & Grain Elevator at Freeman, S. D., has been opened by Kayser & Doering, who have leased that house and those located at Menna and Dolton.

The Honeyford Supply Company of Honeyford, N. D., has purchased the elevator of the Monarch Elevator Company. They have remodeled it and equipped it with a 15-horsepower kerosene engine and cleaner.

The Farmers' Equity Elevator Company has practically completed its new 30,000-bushel elevator at McIntosh, S. D. The equipment includes a 75-bushel per hour three-roll feed mill and a 20-horsepower engine.

WESTERN

A new elevator is being built at Conrad, Mont., by P. J. Anderson.

At Joplin, Mont., the Imperial Elevator Company has built a new elevator.

H. B. Cox will buy and sell grain, hay and livestock at Rocky Ford, Colo.

An elevator is under course of erection at Lohman, Mont., for A. S. Lohman.

G. F. Gilbert & Co.'s Harrison, Idaho, plant has been purchased by A. W. Burleigh.

The Farmers' Elevator Company of Buckingham, Colo., is erecting an elevator there.

The Montana Central Elevator Company has closed down its Geyser, Mont., plant.

The elevator at Whatley (r. f. d. Nashua), Mont., has been closed down for an indefinite period.

The Farmers' Elevator Company recently organized at Nunn, Colo., will erect a new elevator.

The Farmers' Union Mill & Grain Company of Tekoa, Wash., will build an elevator there to handle bulk grain.

A 50,000-bushel elevator and warehouse has been completed and put into operation at Maupin, Wasco County, Ore.

A concrete grain storage plant is to be built at Idaho Falls, Idaho, for the Farmers' Grain & Milling Company.

New concrete storage tanks are to be built at Mansfield, Wash., for the Farmers' Elevator & Warehouse Company.

It is reported that the Royal Milling & Elevator Company has sold its Milliken, Colo., plant to the Farmers' Union.

The Farmers' Co-operative Elevator Company of Wiggins, Colo., has been organized and will build an elevator there.

Four grain storage bins of reinforced concrete construction have been built by the Tempe Milling Company at Tempe, Ariz.

The new elevator of the Wilson Company at Roy, N. M., has been completed. It replaces the one which burned a short time ago.

Arrangements are being made by the Farmers' Elevator Company of Park City, Mont., for the erection of an elevator at Coombs Siding.

A concrete grain elevator with a capacity of 110,000 bushels has been completed at Kendrick, Idaho, for the Kendrick Warehouse & Milling Company.

The Maney Milling Company has let the contract to the Burrell Engineering & Construction Company for a 12,000-bushel cribbed elevator at Lampo Station (Blue Creek p. o.), Utah.

G. M. Whitmore is president, J. W. Whitmore, vice-president; Robert Winn, secretary-treasurer, of the Nephi Grain Elevator Company of Nephi, Utah. The company is capitalized with stock amounting to \$10,000.

The Alger Fowler Company has been granted a license to conduct a public grain warehouse at Everett, Wash., on the dock which the company has leased from the Great Northern Railway. The house has a capacity of 1,000,000 bushels.

Work has been completed on the mill and elevator at Caldwell, Idaho. The elevator includes six tanks 80 feet high and 20 feet across. A building nine stories high and 20 feet wide is located in front of the tanks, in which is placed the elevator machinery.

The Isbell-New Mexico Elevator Company has been incorporated at Willard, Torrance County, N. M., and will erect a bean elevator at Willard. Clinton G. Edgar, Kenneth P. Kimball, J. C. Johnston and Wm. R. Elcock of Detroit; Robert Fletcher, Trinidad, Colo.; John M. Pickel, Willard, and Wm. M. Berger are interested.

MISSOURI, KANSAS AND NEBRASKA

C. A. Kalbfleisch will build a new grain elevator at Smith Center, Kan.

The Dockstader Elevator at Cawker City, Kan., has been closed down.

A farmers' grain elevator company is to be organized at Loretto, Neb.

Chas. Craig has disposed of his elevator at Altamont, Kan., to J. B. Dick.

The E. Stockham Grain Company of Hastings, Neb., has been dissolved.

Geo. Brown now owns the late H. M. Lloyd's elevator plant at Lyons, Kan.

The Farmers' Union has purchased the Seldomridge Elevator at Elwood, Neb.

F. E. Horeman has purchased the elevator of W. C. Evans at Union Star, Mo.

A new elevator is to be built at Pittsburg, Kan., for the Modern Milling Company.

The Duff Grain Company of Nemaha, Neb., will erect a new elevator at that place.

The Gresham Grain Company of Gresham, Neb., has completed its new elevator there.

The Farmers' Union Elevator at Hilton (mail McPherson), Kan., has been completed.

The Tom Long Elevator at Hubbard, Neb., has been purchased by Duggan & Hefferman.

The elevator plant of the Crowell Elevator Company at Pender, Neb., is being remodeled.

The late H. M. Lloyd's grain elevator at Sterling, Kan., has been taken over by Geo. Brown.

The Farmers' Union Elevator Company of Moorfield, Neb., will erect a new elevator there.

The grain and feed business of Adam Seelinger at Rich Hill, Mo., has been sold out by him.

A new elevator is to be built at Blairstown, Mo., for the Graham Grain Company of Ulrich, Mo.

G. Trunkenbolz is erecting a new elevator at Eagle, Neb., with a capacity of 40,000 bushels.

The Hevner Serum Company is building a new 10,000-bushel grain elevator near Franklin, Neb.

Reports state that a Topeka, Kan., grain firm contemplates building a grain elevator at Mankato.

The Van Buren Elevator at Gladstone, Neb., has been purchased by the O. Vanier Grain Company.

Reports state that the farmers of Genoa, Neb., have purchased the Western Elevator located there.

A carloader has been installed in the plant of the Farmers' Union Company located at Seneca, Kan.

Capitalized with stock of \$10,000, the Farmers' Elevator Company has been formed at Panama, Neb.

Roelofson & Moore at Barnard, Mo., have been succeeded in the grain business by I. C. Roelofson.

An addition is being built to the office and engine-

room of the Farmers' Elevator Company of Axtell, Neb.

The Farmers' Elevator Company of Norfolk, Neb., are now occupying the new office which they built recently.

A new elevator has been completed at Mound City, Mo., by the Mound City Mill & Elevator Company.

An elevator of 17,000 bushels' capacity is to be erected at Liberty, Neb., for the Liberty Grain Company.

The elevator and business of the Planters' Grain Elevator, Mule & Feed Company of Caruthersville, Mo., has been sold to N. W. Helm and J. W. Stephens. They will conduct the business as the Caruthersville Hay & Grain Company.

Work is practically completed on the new Farmers' Union Co-operative Company's elevator at Orchard, Neb.

A new 8-horsepower engine has been installed in the plant of the Wright-Leet Grain Company at Rockford, Neb.

The Bowerstock Mill & Power Company has purchased the Cheney (Kan.) Grain & Elevator Company's property.

The Clarksville, Mo., elevator has been purchased by the Carter-Shepherd Milling Company of Hannibal, Mo.

Work has been practically completed on the elevator of the Stauffer-Cammack Grain Company of Baxter Springs, Kan.

W. D. Schmidt's elevator at Appleton City, Mo., has been purchased by the Morrison Grain Company of Kansas City, Mo.

The Spalding Elevator Company of Spalding, Neb., has changed from a stock corporation to a co-operative company.

The elevator of C. A. and F. D. Sperry at Bunkerhill, Kan., has been repaired and enlarged. C. A. Sperry is manager.

Reports state that the Farmers' Elevator Company of Murdock, Kan., has sold out to a Wichita, Kan., milling company.

Chas. G. Simon will erect at St. Louis, Mo., an up-to-date elevator and warehouse on the site of the old one which burned.

The interest of A. G. Weide in the Harder-Weide Hay & Grain Company at Yates Center, Kan., has been sold to G. E. Bowen.

The Farmers' Elevator Company of McCracken, Kan., has let the contract for an elevator, office, engine room and warehouse.

C. L. Willfley and others have incorporated at Golden City, Mo., the Farmers' Supply & Grain Company, capitalized at \$10,000.

The plant of the Severance Grain Company of Severance, Kan., has been sold to the Aunt Jemima Mills Company of St. Joseph, Mo.

A new concrete elevator addition is being built by Powell & O'Rourke of St. Louis, Mo. It will have a capacity of 110,000 bushels.

The Golden Belt Grain & Elevator Company expects to have its 250,000-bushel elevator at Topeka, Kan., completed by January 1.

A grain and feed warehouse will be erected at Bucklin, Kan., for the Gould Grain Company. A small feed mill will be installed later on.

A new grain elevator is to be built at Rolla, Kan., for the H. B. Wheaton Grain Company. Wm. Griffin, O. V. Critz and H. McClelland are interested.

The stock of O. M. Williamson in the Rock Mill & Elevator Company at Hutchinson, Kan., has been sold to J. A. Baker, a Hutchinson grain dealer.

The elevator at Rock Creek, Kan., which H. D. Harding purchased some time ago from F. C. Wegener, is being remodeled. The storage capacity is being doubled and new scale equipment is being installed.

The Mayview Farmers' Association has been incorporated at Mayview, Mo., capitalized at \$50,000. The company will build and operate a grain elevator.

An addition of 30,000 bushels' capacity has been built to the elevator of the Farmers' Elevator Company at Chappell, Neb., making a total capacity of 55,000 bushels.

The Burrell Engineering & Construction Company has the contract from the Farmers' Grain & Supply Company of Schulte, Kan., for a 15,000-bushel grain elevator.

The Derby Grain Company, F. I. Johnson and J. E. Grubb have leased the Cottonwood Valley Mills at Marion, Kan., and will operate as the Marion Milling Company.

The Farmers' Elevator Company, which was recently incorporated, capitalized at \$20,000, will erect a 20,000-bushel elevator at Dunbar, Neb., on the Burlington right-of-way.

A warehouse and coal sheds are to be built at Copeland, Kan., for the Equity Exchange Mercantile Association. Next spring the Association expects to build a grain elevator.

The C. M. & St. P. Railroad is installing in its elevator at East Bottoms, Kansas City, Mo., two No. 2 Invincible Grain Separators, each with a capacity of 4,500 bushels per hour.

J. L. Nelson, A. B. Sawyer, Jr., B. F. Brown, Henry Lothman and T. B. Adams have incorporated the Farmers' Elevator Company of Norborne, Mo. The company is capitalized at \$10,000.

Capitalized at \$30,000, the Farmers' Grain Company has been organized at Thurston, Neb. Joseph Pipal, T. J. Colligan, Frank Johnson, Frank L. Kubik and others are interested in the company.

The Bartling Grain Company is rebuilding the elevator at Wyoming, Neb. The capacity of the plant will be 12,000 bushels. New and up-to-date equipment including a Fairbanks-Morse Engine is to be installed.

The Nye-Schneider-Fowler Company of Fremont, Neb., has completed its new fireproof elevator there, replacing the one which burned last December. The capacity of the plant is 600,000 bushels, with workhouse of 100 carloads grain daily.

The Farmers' Elevator Company of Morton (r. f. d. Hardin), Mo., is ready to start in business. They have purchased the feed and flour stock of Otto Oren and have moved to the elevator which they purchased from Fred Knipschild.

The large concrete addition to the plant of the Buchanan Elevator Company at St. Joseph, Mo., has been completed and large electric motors are being installed and rolls placed to carry 900 extra feet of 30-inch rubber belting. The additional bins, costing \$100,000, will give the elevator a storage capacity of 1,000,000 bushels.

CANADA

The Atlantic Elevator Company is making improvements on its elevator at Colgan, N. D.

The Pike Grain Company has completed its elevator at Grainger, Alta., construction work on which was started last summer.

The Home Grain Company, 512 Grain Exchange Building, Calgary, contemplates the erection of an elevator at Vegreville, Alta.

The Alberta Pacific Grain Company, Ltd., Edmonton, Alta., contemplates the erection of a new elevator at Spirit River, Alta.

F. J. Bawlf & Co. have purchased for \$10,000 the elevator of the Canadian Farmers' Hay Exchange, situated along the Goose Lake Line.

The Vancouver Milling & Grain Company of 236 Smithe Street, Vancouver, B. C., has purchased a site at Langley Prairie, B. C., on which it will erect a new warehouse.

Contract has been let for the erection of two elevators to handle grain at Peace River, Alta. The elevators will be the property of the Alberta Pacific and the Gillespie Elevator Company.

The McGaw Grain and the Lumsden Elevator Companies' respective businesses have been purchased by the McGaw-Dwyer, Ltd., of Winnipeg. W. E. McGaw is president and general manager, W. H. Dwyer, vice-president; O. Ritz, secretary, and N. T. Barker, treasurer. Other directors are: H. D. Dwyer, Irving De Lamater, Henry Ritz, J. J. Stevenson and Otto Ritz.

DEPARTMENTAL CO-OPERATION

Reports of an alleged agitation looking to the suspension during the period of the war of the enforcement to the Grain Standards Act and the grading system established under that act have been brought to the attention of the Food Administration Grain Corporation and the U. S. Department of Agriculture. After a conference between officials of these organizations, the following announcement was made:

"All purchases of wheat over which the Food Administration Grain Corporation has control will be made according to the grades of the official grain standards of the United States from No. 1 to No. 3, and below No. 3, after examination of actual samples of the wheat. The enforcement of the Grain Standards Act will not be suspended by the Government, but on the contrary the Food Administration Grain Corporation and the U. S. Department of Agriculture will co-operate in carrying out its provisions so as to obtain the most beneficial results to all concerned.

"It appears that confusion has arisen on account of the unfamiliarity of many persons in the grain trade with the new standards and also on account of unwarranted practices that have arisen recently, such as the arbitrary assignment of a lower numerical grade to wheat by reason of the presence of dockage, notwithstanding the fact that dockage does not properly enter into the assignment of the numerical grade. Every effort will be made to eliminate these abuses, to bring about the just application of the official standards and to establish fair dealings. It must be remembered that the Food Administration Grain Corporation is compelled to buy within the limits of fixed prices, and

that the Department of Agriculture must see that the standards are correctly applied. Co-operation of producers, the grain trade, and the milling interests with the Food Administration and the Department of Agriculture is required in handling the situation which has arisen as a result of the war crisis."

GRAIN TRADE PATENTS

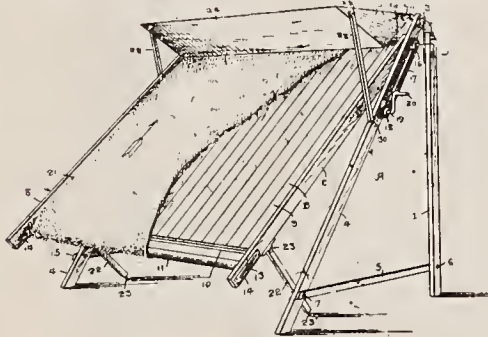
Bearing Date of October 2, 1917

Grain Door for Cars.—Clarence French, Fernald, Iowa, assignor of one-half to Harry S. Fleagle, Fernald, Iowa. Filed May 22, 1916. No. 1,241,841.

Bearing Date of October 9, 1917

Collapsible Grain Cleaning Device.—John A. Johnson, Manfred, N. D. Filed February 31, 1917. No. 1,242,811. See cut.

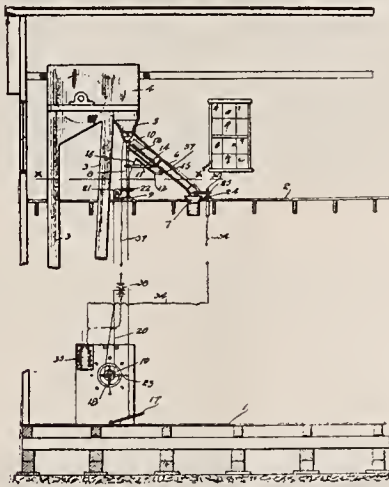
Claim: A knock down grain cleaning device comprising a pair of main supporting frames, each frame consisting of inclined supporting legs connected together at their upper ends, a hopper pivotally mounted at its ends and at one side to the upper ends of said inclined legs, a supporting leg pivotally connected at its upper end to each end of the hopper and to the side



opposite the pivotal connections of said hopper and adapted to be supported at its lower end on the adjacent inclined supporting leg, a separator member pivoted at its upper end to said inclined supporting legs at points between the pivotal connections of the hopper and the lower ends of the hopper supporting legs with said inclined legs, and means for adjustably supporting the lower end of said separator member.

Grain Elevator.—John J. Shotwell, Winnipeg, Man., Canada. Filed November 7, 1916. No. 1,242,482. See cut.

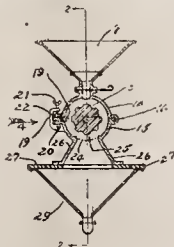
Claim: The combination with a plurality of concentrically arranged and spaced floor funnels, a pivoted distributing spout for delivering to the funnels, and means for operating the spout to bring it into discharging position over one or other of the funnels, of



an annunciator embodying indicators corresponding to the respective funnels, a contact member associated with each funnel, a contact member associated with the distributing spout and an electrical circuit containing a source of electromotive force, the annunciator and the contact members and arranged such that it will be closed by the contacting of the contact members in the discharging position of the distributing spout over a funnel.

Grain Huller.—Burt C. Buffum, Denver, Colo. Filed May 3, 1917. No. 1,242,136. See cut.

Claim: A grain huller including a casing, means arranged therein for separating the hulls from the grain, a casing having a screen covered discharge opening for the hulls, means independent of the feed



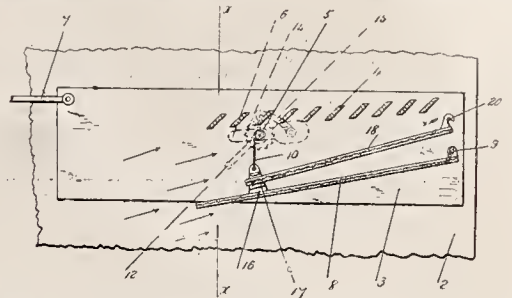
opening of the huller for introducing air into the casing above the screen, and suction-producing means in communication with the discharge opening for the hulls.

Bearing Date of October 16, 1917

Grain Separator.—Austin S. Goodman, Oklahoma City, Okla. Filed January 29, 1916. Renewed August 6, 1917. No. 1,243,284. See cut.

Claim: The combination, with a casing, of shaking shoe supported in the casing, a sieve having its rear end pivoted to the shoe, a cross-shaft extend-

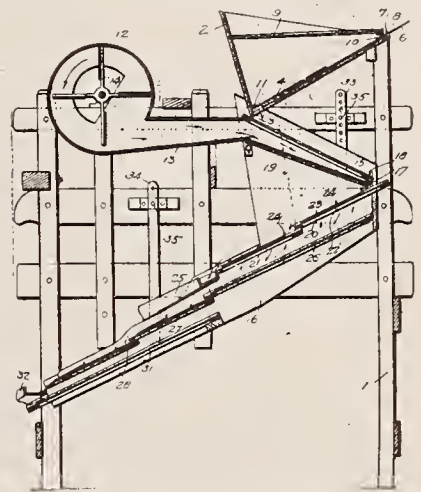
ing through the casing and journaled in and reciprocating with the shoe, flexible connections wound on the cross-shaft and attached to the front end portions of the said sieve, and means for actuating the cross-



shaft to vary the position of the sieve without stopping the machine.

Grain Separator.—Peter Jorgenson, Watertown, S. D. Filed October 16, 1916. No. 1,243,528. See cut.

Claim: In a separator, an inclined screen, means for imparting a lateral vibratory movement to the screen, presser sheets resting upon the screen, and means connecting the presser sheets at their upper edges with



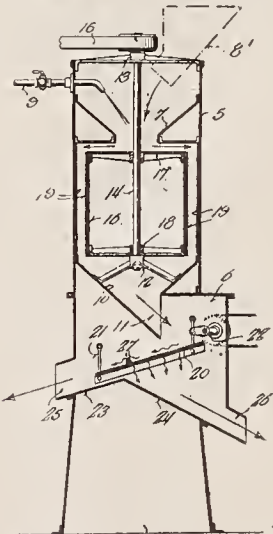
the screen to admit of independent lateral movement between the presser sheets and screen.

Grain Tank.—Howard G. Harrison, Spokane, Wash. Filed April 11, 1916. No. 1,242,935.

Bearing Date of October 30, 1917

Grain Cleaner and Washer.—Peter Provost, Milwaukee, Wis. Filed December 29, 1916. No. 1,244,542. See cut.

Claim: A grain cleaner and washer comprising a vertical casing, the opposite sides of the bottom of said enlarged portion being oppositely inclined from a point adjacent the middle, a grain outlet spout connected with one of the inclined portions of the bottom, a liquid outlet spout connected with the other portion of the bottom, an apertured partition in the lower part of the casing immediately above said en-



larged portion, a spout carried by the partition and communicating with the aperture therein, said spout discharging in a direction toward the liquid outlet spout, an oscillatory screen in the enlarged portion below said spout carried by the partitions, said spout discharging thereon, means for oscillating the screen, an agitating means in the upper portion of the casing, and means for supplying grain and cleansing fluid to the upper end of the casing.

Grain Pickling Machine.—Charles Henry Nelson, Vulcan, Alta., Canada. Filed February 1, 1917. No. 1,244,761.

WHEAT production in France has decreased 50 per cent since the war began, and all foodstuffs have decreased 35 per cent.

FLAT cars are being used for transporting hay in many sections. Shippers will be glad to get anything before the winter is over.

SOUTHERN agronomists are advocating the use of Japanese clover in that section as it grows readily on spots that are ordinarily bare.

IDAHO shippers are making an effort to have that state, or at least the southern part of it, placed in the grain zone with Utah, their natural outlet, instead of with the Pacific Coast States as at present.

ASSOCIATIONS

FALL MEETING OF OHIO DEALERS

As usual the fall meeting of the Ohio Grain Dealers Association drew a very large attendance. The convention was held at the Virginia Hotel, Columbus, November 13, and President Earl C. Bear gave a very cordial welcome to the dealers at the opening of the first session at 10 o'clock and explaining that this was a family business conference of the members and everyone was expected to take part in it. As a preliminary to the discussions he appointed the following Committee on Resolutions: E. C. Eikenbury, C. E. Groce, Fred Kalmbach, Charles Garmhausen.

Committees 1917-1918 were also named by the chair as follows:

Arbitration—J. H. Motz, M. A. Silver, Robt. McAllister.

Legislation—Chas. E. Groce, Fred Kile, J. C. Minnich.

Membership—F. J. Rhinehart, P. W. Davis, R. W. Graham, C. H. Sunday, A. E. Huston, W. G. Bennett, J. Y. Stimmel.

Board of Agriculture—Ohio Agricultural station, Ohio State University—A. R. Moore, C. O. Barnt-house, K. D. Keilholtz, Phil Horn, Raymond Grant, R. W. Lenox, D. R. Risser.

Claim Bureau—A. H. Cratty, Rea Chenoweth, Ed Stritmatter.

Traffic—H. L. Goemann, W. T. Palmer, S. L. Rice.

Secretary J. W. McCord made a brief announcement, calling attention to the fact that dealers had never seen conditions as existed at the present in a period of 30 years past and that the regular business routine would be followed for the meeting.

Dr. J. W. T. Duvel was the first speaker, his subject being the new Government grades of wheat and corn. It was the purpose of the Government, he said, to get the views of the grain men and at public hearings to follow later, pave the way, if it seemed advisable, to make such modifications in the rules as the case seemed to warrant. He had found it to be the prevailing opinion in the grading of soft red winter wheat that have had been established a too tight moisture content, and that the matter of dockage had proven unsatisfactory. If the moisture content was too tight he asked dealers to submit their figures showing grade received, car numbers and particulars and why the dealer thought the grade was not right. He thought present troubles were due partly to a misunderstanding of the rules, which if understood better, would work out all right. There had also been some dissatisfaction in red winter wheat with 6 per cent white wheat going to grade No. 3. There seemed to be a strong disposition on the part of some, with so wide a difference in price, to mix off grade wheat with the better grades. It was the desire of the Government to encourage the production of good wheat of established grade so that the buyer could secure what he contracted for.

Dr. Duvel explained that dockage was inserted in the rules to discourage the marketing of dirty wheat. He thought that every country dealer should have cleaning facilities, machines large enough to do work properly and expressed the view that the shipper should receive some compensation for his dockage. He took a very pessimistic view of the corn crop and advised the dealer to have the former feed all damaged corn on the farm. Corn was running at 30 to 50 per cent moisture with condition very different to that of one year ago.

In reply to a question Dr. Duvel stated that the purpose of dockage was to prevent dirty wheat from going to market. He thought the subject was generally misunderstood by dealers who would favor the practice after finding it would cause higher grades and better prices. He expressed the opinion that 60 per cent of the wheat of Ohio should go to market without dockage.

The question was discussed generally, E. L. Southworth believing that dockage should be paid for, the amount received ultimately going to the producer.

The prevailing opinion was voiced by Mr. Bennett in the claim that no man had a right to take another man's property without paying something for it. The meeting then adjourned.

Afternoon Session

The large assembly hall of the Virginia Hotel was well filled when Chairman Bear called the afternoon session to order at 2 o'clock and asked for a short statement of conditions from representatives of the various terminal markets in attendance. The first to be heard from was E. Milton Crowe of Buffalo, who said he was glad to get back into Ohio, and that it was not a desire to get away

from the state that he went to Buffalo but a matter of a broader education. Conditions at terminal markets now depended upon the policy of the Government and as this was somewhat hazy, grain men would be more or less at sea until things settled into definite shape. It seemed to him, however, as though conditions were improving. Export business of late had not been of much movement but with the new corn and oats on the market he looked for better business. He called attention to the fact that cars could be obtained with more facility if wheat was shipped to the Food Administration. The dealer could bill it to any firm he wished; it would go to the Food Administration anyway.

Fred Watkins of Cleveland related how they had run corn recently through their Hess Drier reducing the moisture from 37 to 16 per cent. That was the kind of corn now shipped in Illinois. They had found that corn heated very quickly.

J. A. A. Geidel said the Pittsburgh market was handling a lot of grain and could handle more. It was handling a lot of hay and could handle more. He advised shippers to keep stuff coming forward pretty regularly. It would be the patriotic as well as wise thing to do. They had received some corn from Ohio, the best of it testing 30 per cent moisture. Their best corn had come from Cumberland Valley, Pennsylvania, and sold at \$1.35 at \$1.50 per bushel.

Ren Martin said that contrary to recent reports there was no embargo at Pittsburgh.

G. A. Hax stated they were getting very little corn from the West at Baltimore. Most of it arrived from Pennsylvania and better conditioned than Western corn selling at \$1.20 to \$1.30 a bushel.

H. A. Lederer of Baltimore urged dealers to be very careful in handling the present corn crop or they would face heavy losses.

E. L. Southworth of Toledo warned against handling the corn crop until it was ready for market. He had seen bad crops before and had seen it come out all right in the end.

F. L. McMannis of Findley said they were only handling corn they could put through a drier.

Mr. Pollock of Middlepoint had not handled any corn yet. He thought it suicidal to shell this corn unless one had a drier on the same lot. Their oats crop was good and they were handling it in the usual way.

Fred A. Croxton, Federal Food Inspector for the State of Ohio, spoke on conservation and the necessity of husbandry all over resources for the needs of the war.

L. C. Titus of Columbus thought that a committee from the Association should go to Washington and present before the proper officials the need of cars to move the corn crop. Farmers needed the money and there wasn't an elevator a distance of 3 days' haul from drying facilities. The principal object should be to secure cars so that grain could be moved.

E. C. Eikenberry of Camden, president of the Grain Dealers National Association, believed that the screenings from the wheat as well as water from the corn should be left on the farm. It was impossible to dry all the corn of the state at once. He spoke of the futility of going to Washington for cars unless backed up by sufficient reasons for the demand. The War Board was acting under orders and it was exceedingly difficult to secure a suspension of orders as to shipping movement. It had been his experience that farmers would take care of themselves. The United States had but one business in hand, that of successfully promoting the war against Germany. Cars had to be used first for the conduct of the war. All of us must perforce contribute to this object even to our loss and discomfort. The farmer was no exception to this.

Mr. Eikenberry, as chairman, then read the report of the Committee on Resolutions. It covered the following points:

Raising moisture content of soft red winter wheat; pledging cooperation in food and fuel conservation; reducing discounts on line grades; commending the plan to hold hearings on standards; pledging loyalty to the Government.

A rising vote of thanks was also extended to Dr. J. T. W. Duvel for his instructive address before the Association on the new wheat grades.

Following the report of the Committee on Resolution the meeting adjourned.

TERMINAL MARKETS

Terminal markets were represented at the meeting by the following:

Toledo: Fred Mayer, E. L. Southworth, W. W. Cummings, Joe T. Gehring.

Cleveland: H. M. Strauss, F. C. Cain, F. E. Watkins, Fred Abel, C. E. Arthur.

Buffalo: Secretary Fred E. Pond, C. T. Doorty, F. J. Schonhart, C. A. Bartow, C. W. Urmston, E. Milton Crowe.

Pittsburgh: Geo. C. Jaeger, J. A. A. Geidel, R. A. Sheets, F. L. Stewart, Ren Martin.

Baltimore: G. A. Hax, H. A. Lederer.

Machinery houses were represented by A. S. Gorman with Huntley Manufacturing Company, Silver Creek, N. Y.; Bert Eesley with Invincible Grain Cleaner Company, Silver Creek, N. Y.; Geo. A. Sutton with The Wolf Company, Chambersburg, Pa.; M. J. Young with Philip Smith Manufacturing Company, Sidney, Ohio.

SEED DEALERS OF TEXAS ORGANIZE

Dallas, Texas, witnessed the organization on October 20 of the seed dealers of the state into the Texas Seedmen Association. A large number of large and small dealers were present and became members, the following officers being elected: Ed. H. Schulte, Houston, president; Robert Nicholson, Dallas, vice-president; J. H. Meredith, Dallas, secretary and treasurer.

ILLINOIS SECRETARY ON THE JOB

Secretary E. B. Hitchcock of the Illinois Grain Dealers Association has returned from a 4-months sojourn in Europe and is again on the job of smoothing the rough places in the path of Illinois dealers.

Shortly after his return he went to Washington to offer Mr. Hoover the use of 1,500 grain elevators in Illinois if the Food Administration wanted to use them. All the equipment and facilities of members of the Illinois Grain Dealers Association was offered unreservedly to the Government.

NEW GRAIN DEALERS ASSOCIATION

The Pacific Northwest Grain Dealers Association is the newest organization of dealers, united for the purpose of looking after the local betterment of the trade. The organization was effected at Portland. The officers are: George W. Smith, president; D. W. L. MacGregor, vice-president, and R. J. Paterson, secretary-treasurer. The directors of the Association are: D. W. L. MacGregor, I. C. Sanford, Peter Kerr and R. J. Paterson, of Portland, and George W. Smith, A. E. Sutton and L. G. Patullo, of Seattle.

ILLINOIS CO-OPERATIVES MEET

The Illinois Farmers Grain Dealers Association met at Galesburg in what proved to be one of the best and most instructive meetings ever held by the organization.

H. W. Danforth described the National Council and told something of the work of the Federal Loan Bank.

Clifford Thorne, who is representing the farmers' elevators in their fight against the raise in freight rates, discussed that subject and told why the advance was refused before and why it should be refused again.

J. W. Shorthill, who was a member of the wheat price commission, told of some of the things that have been going on at Washington.

Collective buying and selling were discussed by A. C. Lyman; W. H. Hayes and O. J. Baer, and Secretary A. N. Steinhart told of the Association work of the year.

The election of officers resulted as follows: J. C. Sailor, Cissna Park, president; John Miller, Galva, first vice-president; Harry M. Wood, Delavan, second vice-president; W. H. Hindall, Natrona, treasurer; A. N. Steinhart, Bloomington, secretary.

Directors: L. B. Olmstead, Somonauk; John U. Surface, Mason City; F. A. Mudge, Peru; Hugh Greig, Oneida; H. J. Wernsing, Harvel; Arthur Lamb, Bement; Marion Gallup, Pontiac.

INDIANA CONFERENCE

On November 1, Indiana grain dealers held a conference which included within its scope taxes, fire protection, wheat grading and corn. E. K. Shepperd of Indianapolis, presided and appointed Elmer Hutchinson, W. M. Moore and Wallace Lyman a Committee on Resolutions.

Winfield Miller discussed income and excess profits taxes. The subject was covered carefully, but there are many features of the tax schedules which will need official explanation.

W. H. Friedley, state fire marshal, told of a number of attempts at incendiarism in grain plants and warned of the absolutely essential care that must be exercised against enemies and also against carelessness. In the discussion which followed other members gave testimony of the value of care at this time.

In the afternoon Evans Woolen, Fuel Administrator for Indiana, told of the coal situation. He said that production was running about 10 per cent above normal but that consumption was 30 per cent above normal and it was the duty of the mines, the railroads and the consumers to make up the deficiency. He told of the crippled condition of the railroads in their shortage of equipment and of men, who had gone into the Federal service. He outlined the attempt to supply the Northwest be-

fore the close of navigation on the lakes and stated that there was a present shortage in the state of some 3,800,000 tons of coal. The price of coal to consumers has not been fixed, only the limit of profit a dealer may take.

Dr. Barnard, Food Administrator for the state, told of the prospect of saving the soft corn by selling it to the distillers who made alcohol for the powder manufacturers. He thought that 50,000,000 to 60,000,000 bushels could be marketed in this way.

Dr. Duvel of the Grain Standardization Office at Washington discussed the wheat grades, with particular attention to the moisture content of Indiana soft wheat. In part he said:

The No. 2 wheat is a 59-pound wheat. A great many through this section and other sections have felt that 59 pounds requirement is too high for No. 2 wheat, being accustomed so many years to 58 pounds; but you must keep this in mind in the wheat standards, that we have five grades instead of four. Your present No. 2 is not your old No. 2, but it should be a better class of wheat. Now, a great many have the idea that because a large percentage of the old wheat had gone into the No. 2 grade the same high percentage should, under the new standards, go into the No. 2, but that is not the case. The standards were not made with that purpose. A part of the old No. 2's go into the 3's, and a part of the old 3's remain in the 3's and a part go down into the lower grades.

Now, take the Toledo market—and I have used that market because I happened to be able to get the figures from there—we have in the 1914 crop in the month of August, 80.8 per cent grading No. 2, only .13 per cent graded No. 3, no 4's, 19.7 per cent sample. In September, 79.4 per cent graded No. 2, no 3's, no 4's, 20.59 per cent sample. In October, 78.9 per cent No. 2, no 3's, no 4's, 29.09 per cent sample. In other words, in 1914 we had two grades in the Toledo market in the months of August, September and October. Now, it seems rather strange that in the 1915 crop there was more No. 3 than 4. The 1915 crop, of course, was an exceedingly poor one, so poor that it was impossible to put that wheat into a No. 2 grade.

I find the percentage I gave you for the Toledo market for No. 1 was a little too high for the red winter wheat. It was 3.8 per cent; 7.68 per cent was for all grades. That takes in the hard winter, the spring wheats and the white wheats. It was 3.8 per cent red winter grading No. 1, 36.6 per cent No. 2, 38.1 per cent No. 3, 6.1 per cent No. 4, 10.6 per cent No. 5, 4.6 per cent sample grade. I believe that is just about the way our wheat would ordinarily run, the majority of it coming within the first three grades, but not so much in No. 2 as has been the case heretofore.

Now, the Indiana wheat does not show quite so high, only 1.8 per cent grading No. 1—this is during August, September and October; 29 per cent No. 2, 54 per cent No. 3 (most of the Indiana wheat going into Grade No. 3, possibly from the standpoint of excessive moisture, which most of you are interested in in this section), 4.6 per cent No. 4, 7.48 per cent No. 5, and 2.79 per cent sample grade.

Dropping down, the weight for the No. 3 is 57 pounds; in the No. 4, 55 pounds; and the No. 5, 53 pounds, those being very much the same as you had in the older grades.

Now, as to the moisture content, in which you are especially interested, we have 13 per cent in the first two grades; and as I said at the meeting of the National Association at Buffalo, if we find that this moisture content is too light for the soft red winter wheat, after working with this crop, we stand ready to modify it. I don't know that I can say any more. When we fixed the grades, our analysis showed that about 75 per cent of the soft red winter wheat would meet that requirement. Now, of course, that included the soft red winter wheat of the Southwest, as well as the soft red winter wheats of this section, and of Maryland, Virginia, Pennsylvania and the Eastern part of the United States. The soft winter wheats of the Southwest very frequently go into the market with a moisture content of 10½, 11 or 12 per cent for the bulk of the crop. The point is whether we should make the moisture requirement so high as to take in the porous wheat that is grown in any section of the United States or fix it on the basis of an average. When we consider it from a milling standpoint or from any other standpoint on the basis of intrinsic value, we find that wheat with 12 per cent of moisture is worth a little more than 2 per cent above wheat with 14 per cent of moisture. Now a great many have this idea, that in wheat with 14 per cent of moisture, if it is dried down to a 12 per cent moisture content, the loss in weight is 2 per cent, but it is just a little bit more than 2 per cent. I can't give you the exact figures, but I do have one figure in mind to illustrate that that will be true more particularly in connection with your corn.

The discussion which followed Dr. Duvel's talk brought out the fact that there was much reasonable objection to the moisture content in the grades for soft wheat, which was finally expressed in the unanimous adoption of the following resolutions:

Wheat Grades Too Rigid

Whereas, It has seemed to the handlers and producers of wheat of the soft red winter varieties that the grades as promulgated by the Department of Agriculture have been too rigid, especially in regard to the moisture content; and

Whereas, The experience of the shippers in handling the 1917 crop in the state of Indiana has been that the wheat was of a high test but of a character that it took on a moisture content that remained with it after it was threshed, but which did not seem to render it liable to get out of condition by reasonable storage; therefore, be it

Resolved, That we earnestly petition the Grain Standardization Department of the Department of Agriculture to raise the limit of moisture percentages allowed in the No. 2 grade to as high a per cent as possible to allow it to be stored in any reasonable quantities without deterioration.

Wheat Samples

Whereas, Dissatisfaction has arisen out of the practice of United States Food Administration requiring two-pound samples of wheat from each car to be sent by the shipper to the zone manager in his respective zone when such wheat is shipped from a point where there is no Federal inspection to a point where there is no Federal inspection and such zone manager placing a grade and value upon such sample; therefore, be it

Resolved, That this Association goes on record as favoring the adoption of handling wheat in the same manner as corn is now handled under like conditions.

Moisture in Wheat and Discounts

Whereas, Standard grades of soft winter wheat flour with a moisture content of 13.5 per cent is deliverable on Government and other contracts for domestic and foreign consumption, and the same can be produced from natural wheat carrying a like amount or even greater per cent of moisture without the elimination thereof, and without endangering the product or embarrassing the manufacturing process; and

Whereas, The producers of such wheat and the first handlers thereof, who are the direct representatives of the producers, now carry the larger per cent of the reserve stocks and are entitled to have the same enter the market on its merits and not under the penalty that falls to it under the system of discounts in force

throughout the country, fixed and applied through and by virtue of the Food Administration's rules and regulations; therefore, be it

Resolved, That we earnestly appeal to the proper Governmental authorities to cause such a readjustment and application of the discounts for winter wheat that approximates the grade of No. 2, as will permit its acceptance by licensed mills, merchants and elevators on No. 2 winter wheat contracts, when qualified for No. 2 grade except as to its moisture content, and when such moisture content exceeds 13 per cent but does not exceed 13.5 per cent it shall be accepted at a maximum discount of ½ cent per bushel and when the moisture content exceeds the 13.5 per cent but does not exceed 14 per cent shall be accepted at a maximum discount of 1 cent per bushel.

OBITUARY

BROWN.—After an illness of more than a month's duration, C. A. Brown, president of the St. Anthony & Dakota Elevator Company of Minneapolis, Minn.,



C. A. BROWN

died in Chicago on November 9. Mr. Brown had been prominent in Chamber of Commerce circles for many years. His widow and six children survive him.

COURCIER.—John F. Courcier died suddenly at Columbus, Ohio, on October 30. He was a former secretary of the Grain Dealers National Association.



JOHN F. COURCIER

tion, and at the time of his death was rate expert for the Ohio Public Utilities Commission.

CLARK.—Chas. R. Clark of C. R. Clark & Co., and a member of the Chicago Board of Trade, died recently. He had been connected with the grain receiving business for many years.

CUMMINGS.—Geo. H. Cummings, aged 66 years, was killed in an automobile accident. He had been secretary of the Sioux City (Iowa) Seed Nursery Company since 1884. He leaves a widow.

DANFORTH.—Aged 84 years, Francis Danforth, a retired Norway, Maine, grain dealer, died suddenly while on his way to Southern Pines, N. C.

DEFREES.—After an illness of several months' duration, Frank B. Defrees died at a Chicago hospital. He was a grain dealer at Goshen, Ind., for many years.

GLASGOW.—On October 29, Harry Glasgow shot and killed himself. He was engaged in the grain and hay business at Choteau, Okla.

HALSTED.—Edw. Monroe Halsted died on October 21 at Los Angeles, Cal. For many years he was with the Albert Dickinson Company.

HARDY.—W. L. Hardy died at Minneapolis, Minn., on October 25. He was a former member of the Minneapolis Chamber of Commerce and at one time was connected with the Northwestern Elevator Company. He was 58 years old at the time of his decease.

HARGRAVE.—Michael P. Hargrave died during October at his home in Galveston, Texas. He was senior member in the Hargrave's Seed Store which he established in 1901. His widow, one daughter and five sons survive him.

HILL.—Dropsy and heart trouble caused the death of Stephen J. Hill, Jr., representative on the New York Produce Exchange of Power Son & Co. Mr. Hill was 38 years old at the time of his death.

KLENCK.—Geo. A. Klenck died at his Evansville, Ind., home not long ago. He was engaged in the grain and feed business there and at one time had operated an elevator and mill at Oakland City, Ind.

LANGTON.—Aged 40 years, Jas. Langton, a grain, coal and feed dealer, died at his home in Orange, N. J., from ptomaine poisoning.

LENNON.—F. J. Lennon was killed in an automobile accident. He was a well known New York distributor of grain, hay, etc., and was a member of the Produce Exchange of that city.

MATTHEWS.—Chas. D. Matthews, Sr., of Sikeston, Mo., died of heart disease at his home on October 17, aged 74 years. Mr. Matthews was a pioneer grain and mill man and was one of the founders of the Scott County Milling Company.

MCDONALD.—Joseph McDonald, a former member of the Chicago Board of Trade, died at his home in Chicago recently. He had at one time been connected with Merrill Follansbee and later on with Chas. Trego in the commission business. Two daughters survive him.

RHEA.—I. T. Rhea, a Nashville (Tenn.) grain man, died recently, aged 70 years.

SHERWOOD.—After a short illness, Frank H. Sherwood, connected with the seed and grain brokerage firm, F. H. Sherwood Company, Sacramento, Cal., passed away in that city. Mr. Sherwood, who was 38 years old, leaves a widow and two children.

SPERRY.—David Baldwin Sperry, a veteran Louisville, Ky., seed man, died at his home there recently. Shortly after the Civil War he engaged in the seed and wholesale produce business under the name of Reed & Sperry, which later became Sperry, Frederick & Bowen. Mr. Sperry retired two years ago. Widow, two sons and two daughters survive Mr. Sperry.

STEWART.—Frank C. Stewart died at his home in West Mansfield, Ohio, from paralysis. He was a prominent grain dealer.

TOOLE.—Hugh Toole died from a bullet shot in his head. It is not known whether it was accidental or intentional. Mr. Toole was manager of the elevator at Minot, N. D.

FIELD SEEDS

A seed corn house has been built at Hutchinson, Minn., by H. L. Merrill.

The Oshkosh Seed Company of Oshkosh, Wis., has increased its capital stock to \$100,000.

The Sweetwater Seed & Grain Company of Sweetwater, Texas, will build a new structure there.

The Condon Bros. have sold out their retail seed store in Rockford, Ill., to S. Peterson, a florist.

G. H. Veatch's seed and feed business at Ellsworth, Kan., is now the property of George Lafferty.

Chester Jay Hunt has incorporated at Little Falls, N. Y., to handle seeds. Capital stock amounts to \$50,000.

A building in Carpinteria, Cal., has been leased by Henry Berrien Fish, in which he will install new bean handling machinery. The company will do business under the name of Henry Berrien Fish,

Seedsman. Chas. B. Howe and Frank Roberts will be associated with him.

The Sioux City Seed Company of Sioux City, Iowa, is installing a percentage measuring and blending machine.

H. H. Miller is now a member of the firm, Funk Bros. Seed Company of Bloomington, Ill. He will be assistant manager.

H. P. Headley, R. S. Scrugham and G. Duval have incorporated at Lexington, Ky., as Headley & Co. Capital stock is \$10,000.

The capital stock of the Peninsular Seed Company of Port Huron, Mich., has been increased from \$40,000 to \$70,000.

The capital stock of the Manitowoc Seed Company located at Manitowoc, Wis., has been increased from \$20,000 to \$100,000.

Walter L. Nossaman has incorporated the Aab-

ling's Seed Farms, Inc., of Seattle, Wash. Capital stock amounts to \$200,000.

A new \$200,000 seed elevator, warehouse and cleaning plant is to be built at Milwaukee, Wis., for the L. Teweles Seed Company.

Harry N. Leckenby has entered the seed cleaning business at Seattle, Wash. He was formerly with Chas. H. Lilly Company at Seattle.

The stock of Dr. L. M. Clayton, in the seed and feed business at Liberal, Kan., has been sold to the W. H. Vickers Grain & Seed Company.

The Annual Seed Show of the North Dakota Improved Seed Growers' Association of Fargo, N. D., is to be held from January 15 to 18, 1918.

M. G. Lion has been taken into partnership by W. J. Fosgate of Santa Clara, Cal. The seed growing firm will now be operated as Fosgate & Lion.

The Mississippi Valley Seed Company has been formed at Omaha, Neb., capitalized with stock of \$100,000. J. W. Ratekin is interested in the concern.

Herbert and Simon Herzstein, R. W. Burrage, John H. Guyer and E. A. Mattingly have incorporated as the H. Herzstein Seed Company of Clayton, N. M.

A building at Grand Rapids, Mich., has been leased by the Alfred J. Brown Seed Company, who will utilize it for a warehouse and seedpacking establishment.

A tract of land has been secured near Ralston, Neb., by the Nebraska Seed Company of Omaha, Neb., on which it will erect at a cost of \$5,000 a new seed drying house.

The Ratekin Seed House buildings and equipment has been taken over by Henry Field Seed Company of Shenandoah, Iowa. This will be known as the company's Warehouse No. 4, and will be used for storage purposes.

A branch office has been opened up at Ames, Iowa, by Blair-Harper & Co., of Aurora, Ill. The branch has been incorporated by F. D. McClenahan, Geo. Judisch, Geo. F. Graham, T. H. Woodruff and B. G. Budge. Capital stock is \$20,000.

The Interstate Seed & Grain Company has been organized at Fargo, N. D., capitalized at \$50,000. The company will absorb the business of the H. L. Landblom Company at Moorhead, Minn., and will deal exclusively in seed and potatoes at Moorhead and Fargo. They have purchased the Schoenhoffen Brewing Company's plant at Moorhead and will install cleaning and other machinery.

LITTLE CHANGE IN TIMOTHY SEED

"Timothy seed tried to get out of the rut middle of week. Demand was rather spirited both for December and March, but general weakness in grain and stock markets finally affected both red and timothy. Receipts have fallen off sharply but enough already received to fill current demand. Stocks here appear ample, but with lighter receipts expected and a good stiff demand started in the early spring, would see them melt away. Majority in the trade feel friendly to timothy and expect prices to range higher later on. May take the place of clover in many instances. Alsike too, should come in for its share of prosperity and take the place of clover in some sections."—J. F. Zahm & Co., Toledo, Market Letter of November 12.

\$16 CLOVER SEED

"\$16 seed is here. Acts as though it may hang up its hat and stay awhile. Seems right at home way up there. Around \$16, seed is at the Pike's Peak of clover prices. October voted wet on seed. It started the trouble. November dry so far. The real damage was done last month.

"Cash clover premiums widening. Reflects cash seed scarcity. Arrivals few and far between. Note figures for week. Compare with other years. Note also shipments. Stocks of seeds normally accumu-

THE ILLINOIS SEED CO.
CHICAGO, ILL.
We Buy and Sell
FIELD SEEDS

Ask for Prices. Send Samples for Bids.

Grain and
Seeds

WANTED

We are in the market for clover seed, screenings, tailings, and badly bucked clover seed. Send samples to THE KING SEED CO., North Vernon, Ind.

WANTED

By an old established seed house, a thorough business man of character, capability and experience in the general seed business. State qualifications, experience and salary wanted. SEED HOUSE, Box 10, care "American Elevator and Grain Trade," Chicago, Ill.

WE BUY AND SELL

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Write Us Your Needs

SCHISLER-CORNELI SEED CO.
St. Louis, Mo.

LARGE DEALERS IN SOUTHERN FALL GRAINS,
CLOVERS, VETCHES, GRASSES,
AND OTHER SEEDS

Get Willet's Weekly Current Price List.
Get Willet's Fall 1917 Seed Catalogue—out late in August.

N. L. WILLET SEED CO.

AUGUSTA,

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Cochrane Quality Field Seeds Are the
BEST THAT GROW

Twenty buying stations in the producing sections of Wisconsin and Minnesota enable us to buy the "cream of the crop." Write for quotations and samples.

T. H. Cochrane Co., PORTAGE, WISCONSIN
We want to buy Clover, Alsike, Timothy, Alfalfa
White Clover.

SEEDS Grain, Clover and Grass Seeds
CHAS. E. PRUNTY
7, 9 and 11 South Main St. SAINT LOUIS

The ALBERT DICKINSON COMPANY

GRASS SEEDS FIELD

To Meet Demands Of

PURE SEED LAWS

Chicago

Minneapolis

We Can Offer
HIGH GRADE

ORCHARD GRASS
RYE GRASS
WHITE CLOVER
HAIRY VETCH
D. E. RAPE

Wm. G. Scarlett & Co.

Wholesale Seed Merchants—Importers and Exporters
Baltimore, Md.

late at this time of year. Conditions this season are abnormal.

"Market shows abundant absorbing power. Seed is in demand on any reactions."—*Southworth & Co., Toledo, Ohio. Letter of November 12.*

FUMIGATING SEEDS

Where it is undesirable or impracticable to use the carbon bisulphide method of destroying insect life in seed, the heat method may be used advantageously and successfully, if care is taken. The seeds are placed for a period of four or five hours in shallow trays in a heat registering 130° or 135° F. When small quantities of seed are to be fumigated they can be placed in a shallow pan in an oven and by stirring every few minutes, to prevent them from heating unevenly, they will be ready after an one-half hour treatment. However, the disadvantage with the heat method is that the germinating powers of the seeds are apt to be destroyed and for this reason this method is not given preference over the carbon bisulphide treatment.

ALFALFA SEED IN KANSAS

The U. S. Department of Agriculture estimates that the alfalfa seed crop in Kansas this year is about 50 per cent of the 1916 crop, but as the 1916 production was larger than usual, the present crop is nearer normal than this percentage would indicate.

Abnormal weather conditions that prevailed this year, especially at harvest time, have affected the quality of the crop considerably. Much of the crop contains a large amount of brown and shriveled seeds, but high grade lots such as could easily be obtained last year, are very scarce in the state this year. The shrinkage which normally averages about 10 per cent is averaging from 20 to 25 per cent this year. Fair quality seed is being bought at prices ranging from \$7.00 to \$8.50 per bushel and re-cleaned seed is bringing up to \$9.50 per bushel, basis country shipping points.

CLOVER SEED MOVEMENT IN WISCONSIN AND MINNESOTA

Wisconsin's clover seed crop of 1917 is about 75 per cent of normal, owing to the lateness of the first and second cuttings, says the U. S. Department of Agriculture. About 10 per cent of the crop had moved from farms to storage points by the middle of October. Alsike is practically all hulled and 50 per cent is at storage points here and abroad. Acreage was less than in 1916, but yield per acre greater. Quality of red clover and alsike seed is very good. Prices, basis re-cleaned seed, range from \$21 to \$24 per hundred weight for red, \$19 to \$22 for alsike, \$35 to \$43 for white clover. Wisconsin dealers are not anxious to buy and store clover seed at prevailing high prices, but prefer to keep seed moving.

Minnesota's clover seed crop of 1917 is about 20 per cent that of the 1916 crop, due to extreme lateness of the first and second cuttings, and hot weather at maturing time. Most of the regular producing sections have seed, but only in small amounts. Seed is being marketed as fast as it is hulled, high prices proving very attractive to the farmer. Re-cleaned seed is being bought basis country shipping points at from \$20 to \$24 per hundred weight for red clover, and \$18.50 to \$22 for alsike. These prices are not attractive to the average dealers and they are not inclined to buy heavily.

STORAGE OF SEED WHEAT IN THE NORTHWEST

The Grain Corporation of the Food Administration and the United States Department of Agriculture are co-operating to see that sufficient seed wheat is stored in elevators and warehouses to meet next spring's demand.

Blanket licenses for the storage of seed wheat and rye are being issued to elevators and warehouses by the Corporation, and the United States Stocks Committee has undertaken the approval of all lots stored in this manner. These lots, if approved for seed by the Committee, may be sold at not to exceed 15 per cent over the selling price of No. 1 wheat at the elevator where it is stored.

The Committee has regularly authorized agents at four points in the Northwest: W. L. Oswald, 320 Flour Exchange, Minneapolis, Minn.; G. S. Ray, Moscow, Idaho; E. G. Schafer, Pullman, Washington, and G. R. Hyslop, Corvallis, Oregon. These agents examine representative samples of lots held for storage and pass on them as to their fitness for seed. If the seed is of poor quality, storage longer than 30 days is not allowed. The following factors are considered in this examination: Purity as to variety, purity as to freedom from weed seeds, grade, germination, freedom from disease, and freedom from noxious weed seeds.

Most elevators have not yet commenced to store seed wheat and from present indications will not start to store much for another month. This is due to the fact that favorable weather conditions have

kept the farmers in the fields and much of the wheat is still unmarketed. Also, most elevators need their entire space for the regular run of grain coming in at this time. As soon as the elevator bins can be spared, seed wheat storage will commence.

While most concern is given to the inspection and storage of stocks of spring wheat suitable for seed, some attention is also paid to stocks of winter

wheat, and these will be examined for licensed elevators and warehouses in the same manner as samples of spring wheat.

The necessity for storing ample supplies of good seed is very urgent, and it is hoped that grain dealers will co-operate with the state organizations and the Department's Committee on Seed Stocks to the fullest extent possible.

HAY, STRAW AND FEED

G. F. Hill will conduct a feed business at Springfield, Ore.

Melvin Erickson will conduct a feed business at Walker, Minn.

A feed business has been started at Genoa, Ill., by N. E. Davis.

Robt. Fett will conduct a feed and flour business at Eagle River, Wis.

S. Antonoff will conduct a feed and flour business at Ladysmith, Wis.

W. F. Baker has sold his Goshen, Ind., feed and flour business to Marion Yoder.

J. W. Segee has sold his feed business at Weeks Mills, Maine, to Earl Harvey.

W. W. Bryson's feed store at Heavener, Okla., is now owned by J. W. Edwards.

A new feed and flour store has been opened up at Abbotsford, Wis., by Chas. Hanna.

A feed and flour business has been opened up at Oskaloosa, Kan., by C. G. McHenry.

Earl J. Cobb has sold his feed and flour store at Sun Prairie, Wis., to Carl O. Krause.

A. W. Rehard and John Bouck have entered the feed and flour business at Akely, Minn.

C. Wilt & Son, hay, feed and grain dealers of Philadelphia, Pa., retired from business.

Parker & Barnard succeeds A. C. Parker in the feed and flour business at Phoenix, N. Y.

Lewis H. Fleming will engage in the feed and flour brokerage business at Albany, N. Y.

The Unity (Wis.) Produce Company has sold its feed business to J. E. Lyons & Co., of Colby.

A hay barn, 912x100 feet, is to be built at Kansas City, Mo., by the United States Government.

H. Grantman's feed business at Lomira, Wis., has been purchased by L. Rosenheimer and others.

C. H. Veatch's feed and seed business at Ellsworth, Kan., is now the property of Geo. Lafferty.

A wholesale feed and flour business has been opened up at Drumright, Okla., by Buck Tharel.

W. J. Parsons has purchased the feed and grain business of Chas. Hipsley at New Market, Iowa.

Thomas Jaycox & Son have sold out at Jerome, Idaho, to the Anchor Hay, Grain & Feed Company.

Guy Willison's interest in the Copan Feed Store, Copan, Okla., has been purchased by A. J. Wigfield.

A feed store has been opened up at Sault Ste. Marie, Mich., by the Hewitt Grain & Provision Company.

The flour and feed business of the late John Geisler at Steuben, Wis., has been purchased by Chas. Koschkee.

Sherman Morman and Walter Richards now own the feed and flour business of Bradaun & Stitch at Stillwater, Okla.

The People's Flour & Feed Company of Mitchell, S. D., has dissolved. Geo. D. Jones and C. H. Cox were interested.

A four-story warehouse, 50x80 feet, is to be built for Albert D. German, a feed and flour dealer, at Richland Center, Wis.

E. Stanton and others have incorporated as the Midway Coal & Feed Company at Picher, Okla., capitalized at \$10,000.

The capital stock of the Zink Bros. Hay & Grain Company of Detroit, Mich., has been decreased from \$15,000 to \$7,500.

A brick warehouse is being built and a 16x60-foot

addition is being erected to the elevator of the Burlington Feed Company at Burlington, Wis.

A new building is being erected at Cleburne, Texas, for the Kansas City Produce Company, in which they will conduct a hay, grain and produce business.

M. L. Cushing and others have organized at Fitchburg, Mass., the J. Cushing Company to deal in hay, grain and feedstuffs. Capital stock amounts to \$600,000.

The C. S. Kraybill feed store at Abilene, Kan., has been purchased by J. L. Parks. Associated with him will be C. W. Morilla, formerly of the Kansas City Hay Company.

H. E. Chatterton, Sam Harris, Jay Wyman and others have incorporated at Clare, Mich., as the Clare Hay, Grain & Bean Company. Capital stock of the company amounts to \$10,000.

The interest of L. J. Roberts in the feed and grain business of Page & Roberts at Bangor, Wis., has been purchased by W. H. W. Page. The business will now be conducted as the Page Bros.

KANSAS CITY HAY MARKET

BY B. S. BROWN.

The movement of hay to the Kansas City Market—and through it—increased markedly in October, the record for single day's receipts being broken for timothy, and total hay receipts breaking the record for a single month established in April, 1915. The high prices—more than double the same time last year—brought out the hay; and the quotations were maintained, even gaining under the movement. The Santa Fe and the Missouri Pacific put embargoes late in the month, on hay for this market, due to congestion at yards in and near Kansas City.

The Board of Directors of the Kansas City Hay Dealers Association on October 30 adopted a rule that sellers' invoice weights shall be taken, in the absence of agreement otherwise, at time of sale, and in the absence of shippers' or unloading weights.

ST. LOUIS HAY MARKET

The Mullally Hay & Grain Company, St. Louis, Mo., report for week ending November 12:

"Our market, the past few days has reacted with more strength than ever owing to the increased shipping demand and buyers have been taking all the timothy and clover mixed offered at a higher range of prices causing a free movement and our market has kept well cleaned up right along and is in excellent condition for fresh arrivals and we advise prompt shipments.

"Pure clover hay is in scant offerings and demand urgent. Prairie hay is scarce and wanted, not near enough prairie has been arriving to supply the trade and the market is bare of all grades and fresh arrivals of prairie would meet ready sale at outside prices and we advise prompt shipments. Alfalfa hay is ruling firm with an excellent demand for all grades."

Toberman, Mackey & Co. of St. Louis, say in report issued November 12:

"The market on hay is steady, with a good demand all around for the arrivals, and we believe that present prices will be well maintained during this and the coming week. Clover hay still scarce, in good demand, as well as heavy mixed and all grades of clover mixed hay. We urge shipments. Alfalfa in active demand for high grades, bringing strong prices, good demand for the medium grades. Very little prairie on the market, with a good demand, especially for high grades. The medium grades in better request. Straw still scarce and in demand."

A L F A L F A	ALFALFA	A L F A L F A
	We are the Largest Distributors	
	of ALFALFA in	
	GREATER NEW YORK	
	Shippers who have Alfalfa Hay to dispose of, if they will communicate with us we will provide a satisfactory outlet.	
A L F A	ALFALFA	A L F A
	W. D. Power & Co., 12-15 N. Y. Hay Exchange NEW YORK	

ESTABLISHED 1870	
W. R. MUMFORD & CO.	
Commission Merchants	
Hay, Grain, Millstuffs, Futures	
Consignments Solicited	
We Guarantee Good Service	
Postal Telegraph Bldg.,	Chicago

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS**BUSINESS OPPORTUNITY**

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**Miscellaneous
Notices**

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

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FIRES—CASUALTIES

McClelland, Iowa.—J. F. Twamley & Son's elevator here was damaged by fire recently.

Hampton, Iowa.—The Farmers' Elevator was damaged to the extent of \$1,000 by fire.

Clarence, Ill.—The building of the Frederick Grain Company sustained damage by fire.

Waverly, Ill.—W. R. Turnbull's elevator burned to the ground on November 9, a total loss.

Hudson, Wis.—Fire loss was suffered by the New Richmond Elevator Company on its plant here.

Keota, Iowa.—The property of L. H. Marr & Son, flour and feed dealers was destroyed by fire recently.

South St. Joseph, Mo.—Fire damaged to the extent of \$1,000 the feed store at this point owned by W. C. Acker.

Mount Jackson, Va.—The feed store of W. E. Carroll was destroyed during a large conflagration in Mount Jackson recently.

Olanta, S. C.—The seed warehouse and cotton ginners of the John McSween Company burned. Loss amounted to \$10,000.

Buffalo, Kan.—The Carlisle Commission Company's hay barn here burned. About 150 tons of hay were also consumed.

Brooklyn, N. Y.—The plant of the elevator company, J. W. Gestergder & Son, was damaged to the extent of \$200,000 by fire.

Ripley, Tenn.—The grain elevator and flour mill of the Farmers' & Merchants' Milling Company burned. Losses amounted to \$33,000.

Southey, Sask.—On October 13 the Maple Leaf Milling Company's elevator burned. About 20,000 bushels of grain were also consumed.

Covington, Okla.—Fire destroyed the old Farmers' Elevator Company's plant at this point on October 24. The origin of the fire is not known.

Sherman, Texas.—The seed warehouse of the J. B. R. Smith Milling Company burned recently. Large quantity of seed wheat and oats were also burned.

Armour, S. D.—Part of the Carlon Elevator Company's elevator here collapsed not long ago, and thousands of bushels of wheat and barley were dumped.

Cincinnati, Ohio.—The auxiliary plant of The Early & Daniels Company burned with \$100,000 losses. The plant was used exclusively for hay pressing.

Centralia, Wash.—Fire, apparently of incendiary origin, destroyed the grain, flour, hay and cement warehouse of Sears Bros. & Rouwell during the month of October.

El Paso, Texas.—The Alameda Fuel & Grain Company's warehouse, of which Sam and Joe Rosenwasser were the owners, was damaged by fire to the extent of \$2,500.

Jonesville, Ind.—H. Griffith's elevator near here burned, together with 4,000 bushels of wheat. Loss amounted to \$25,000, covered by insurance. The elevator is to be rebuilt.

Greenfield (r. f. d. Blanchard), N. D.—The office room of the elevator here was destroyed by fire

which threatened for a time to spread to the main elevator. The office was rebuilt immediately and a new engine installed.

Inglewood, Cal.—The Freeman Warehouse was destroyed by fire believed to have been of incendiary origin. About 900 sacks of beans and 100 tons of hay were also consumed.

Memphis, Tenn.—Fire destroyed a grain bin at the elevator of the firm of G. E. Patterson & Co., entailing a loss of \$5,000. The fire is thought to have been started by a hot box.

St. Louis, Mo.—The Great Western Feed Company's elevator and warehouse was destroyed completely by fire with a total loss to the owner, Chas. G. Simon. He will rebuild at once.

Maryfield, Sask.—The Saskatchewan Co-operative Elevator Company's plant, containing 6,500 bushels wheat, was destroyed by fire. The loss, amounting to \$10,000, was covered by insurance.

Edna, Texas.—C. Branch's feed warehouse was damaged by fire of unknown origin recently. A considerable quantity of alfalfa and cottonseed burned. Loss amounted to about \$6,500.

Reedsville, Wis.—A small fire occurred in the Reinemann Elevator alleged to have resulted from the back-firing of a gasoline engine. The blaze was extinguished before serious damage was done.

Varco Station (mail Austin), Minn.—A C. Brooks' elevator here was totally destroyed by fire on October 31. It is thought that the fire started from a spark from a passing locomotive. Loss amounted to over \$8,000.

Fremont, Ohio.—Fire destroyed the Havens Elevator & Supply Company's elevator on October 23. About 2,000 bushels wheat, 5,000 bushels oats, and several cars were burned. Loss amounted to \$20,000, partially covered by insurance.

Civer (near Lewiston), Ill.—The elevator at this place, owned by Buckley & Co., of Peoria, was destroyed by fire, together with about 1,000 bushels oats and between 600 and 700 bushels wheat. The loss is partly covered by insurance.

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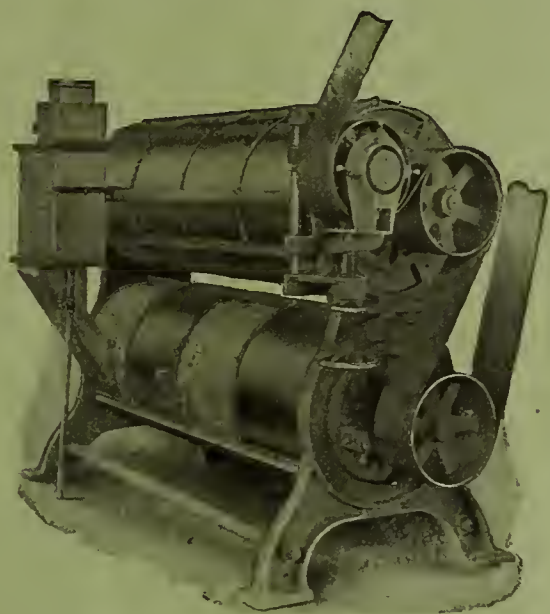
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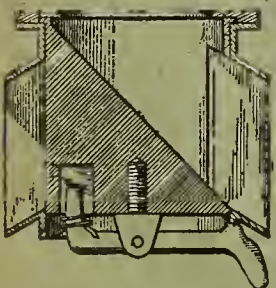
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